B&O BEOVISION MX5500

MODEL

OWNER'S MANUAL

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4 Connections
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12 Operating the TV-set close up
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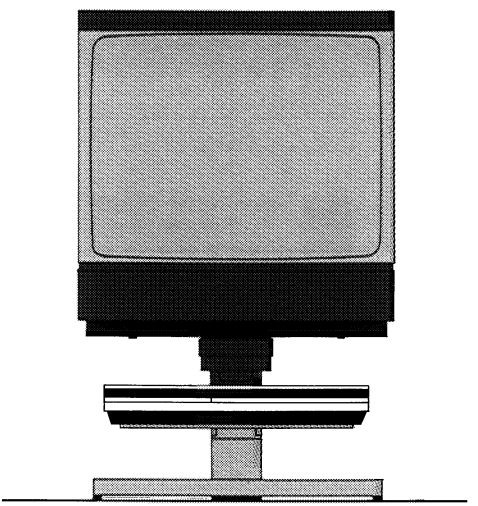
See the Video System MX user's guide for detailed operating instructions.

The Beovision must be placed on a firm surface. Allow a space of at least 5 cm above and to the sides of the TV-set for adequate ventilation.

Ideal placement of the Beovision is on the motorized stand MS MX 55 designed specifically for the Video System MX.

Please contact your Bang & Olufsen dealer for further information about Bang & Olufsen stands.

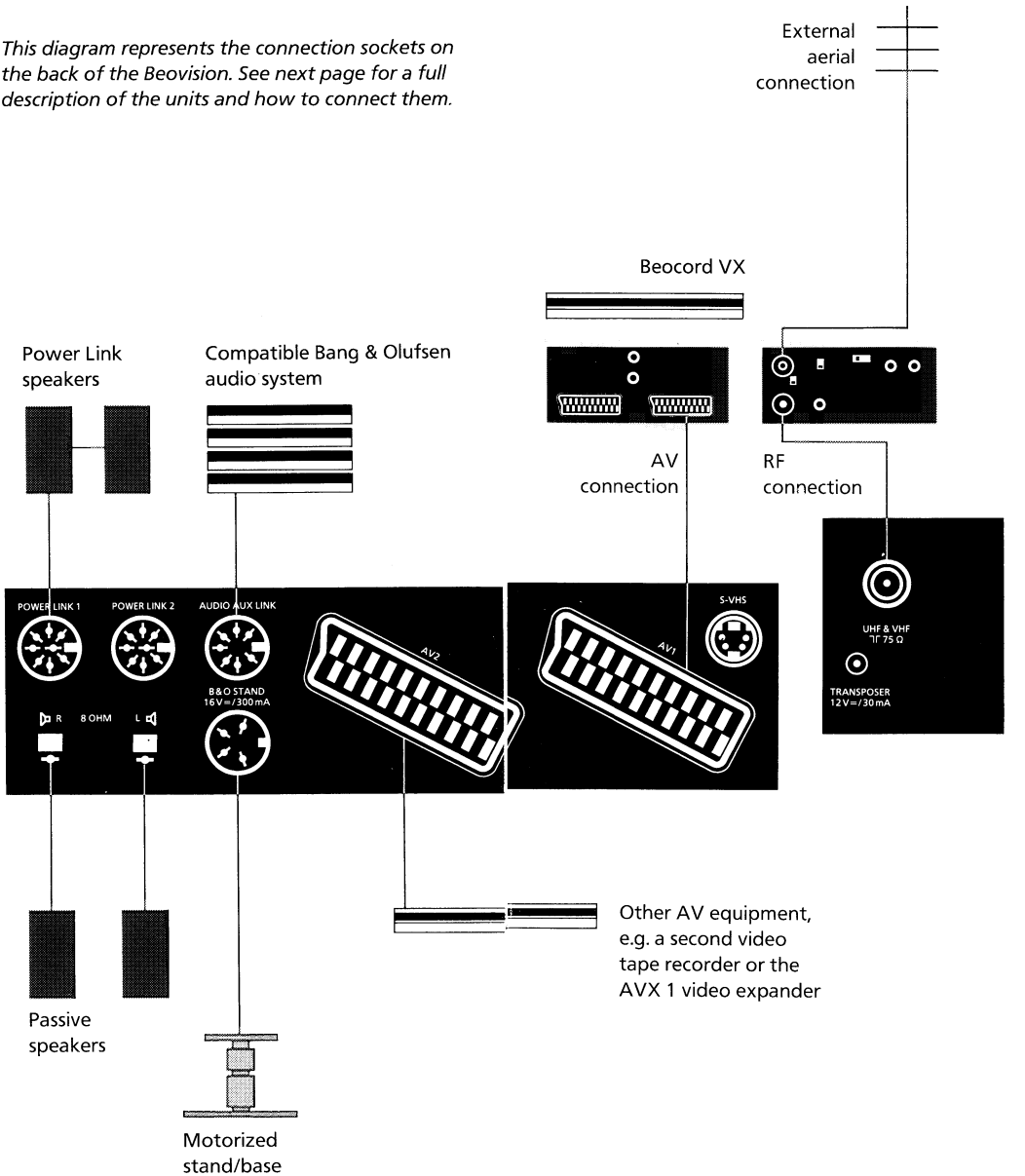
Note: Any loudspeakers placed closer than 2 m to the TV-set may disturb the TV picture under certain circumstances. If this should happen, we recommend that you move the loudspeakers slightly further away from the TV-set.



Connections

All units in your Video System must be interconnected **before** they are plugged in to the mains.

This diagram represents the connection sockets on the back of the Beovision. See next page for a full description of the units and how to connect them.



These units can be connected to your Beovision:

Power Link speakers
The sockets marked POWER LINK 1 and POWER LINK 2 are for connecting active loudspeakers with the Power Link facility, e.g. the Bang & Olufsen Beolab 5000. The Power Link sockets are identical, which means that they both carry left and right channel information.

The loudspeakers can be connected in series to the Beovision, as shown in the diagram, or one loudspeaker to either of the two sockets.

Please refer to the loudspeaker manual for further information about speaker setup.

Passive speakers
Auxiliary speakers (8 ohm) such as the Bang & Olufsen Beovox 3000 or 5000 can be connected to the TV-set. Connect the right-hand speaker to the socket marked R and the left-hand speaker to the socket marked L.

Audio system
The socket marked AUDIO AUX LINK is for connection to a compatible Bang & Olufsen audio system, for example the Beosystem 6500.

Motorized stand
Connect the MS MX 55 motorized stand (or the MB MX 55 motorized base) to the socket marked B&O STAND.

Beocord VX
Connect the Beocord VX to the socket marked AV 1 using the AV cable enclosed with the Beocord VX. Also, connect the aerial output of the Beocord VX marked RF OUT with the aerial input of the Beovision using the RF cable enclosed with the Beocord VX.

Other AV equipment
The socket marked AV 2 is for other AV equipment, e.g. a second video tape recorder or the AVX 1 video expander, which provides AV connection facilities for three different AV sources.

Aerial
Connect the cable from your external aerial to the aerial socket on the video tape recorder, and forward the aerial signal to the aerial socket on the Beovision.

Alternatively, if your Video System does not comprise a video tape recorder, connect the external aerial cable directly to the aerial socket of the Beovision.

Connections not shown:

S-VHS

The S-VHS connector is for a video tape recorder or video camera using the S-VHS format. Press SHIFT, 9 to activate the S-VHS connector.

Transposer

The socket marked TRANSPOSER is for a special transposer required for the French SECAM L TV system.

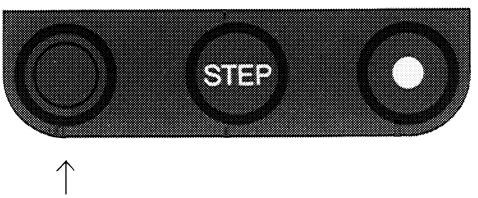
For details about satellite dish connections, see the Beosat LM setting up guide.

Headphones

Headphones, e.g. the Bang & Olufsen Form 1 or Form 2 headphones, can be connected to the TV-set via the headphones socket on the front in the lower right-hand corner.

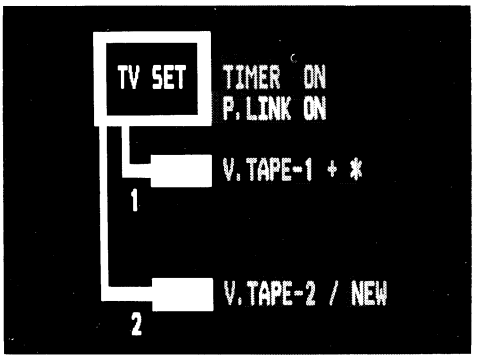
If you want to listen in privacy, that is without the TV speakers or Power Link speakers cut in, set the loudspeaker switch function to INTERNAL.

See the Video System MX user's guide for details about the speaker switch function.



Once you have interconnected the units in your Video System, the TV-set must be programmed accordingly.

To do so, switch on the TV-set by pressing TV, then press SHIFT, TEXT to access the on-screen setup programming display.



Sample display symbolizing the TV-set with the Beocord VX 5000 connected to the AV 1 socket and a second video tape recorder connected to the AV 2 socket.

You may have to change the data in the setup display, e.g. if you have connected other AV equipment. To do so, move the cursor to the option desired by pressing ≫, then press > repeatedly to reveal the options available.

Once you have filled in the data corresponding to your Video System setup, press PLAY to store them and remove the display. Alternatively, press STOP just to remove the display and revert to the setup data previously stored.

Timer and Power Link speakers

These two options refer to internal TV functions:

TIMER can be set ON or OFF.
If set to ON, the TV-set will reproduce any timer programmings made in your Bang & Olufsen audio system, provided of course that there is a Beolink connection to your audio system.

P. LINK can be set ON or OFF.
P. LINK refers to the Power Link speakers connected to the TV-set. Select ON to activate the speakers.

AV equipment

The following options are available under each AV socket:

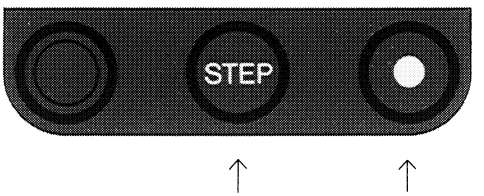
V.TAPE-1 means primary video tape recorder.
V.TAPE-2 means secondary video tape recorder. Press SHIFT, V.TAPE for access.
* means no source connected.
NEW/OLD refers to the remote control format used by the video tape recorder (please refer to your Bang & Olufsen dealer for details).
DECODER-1(2-3-4) means TV decoder 1 (or 2, 3 or 4).
SAT refers to an external satellite receiver (any satellite receiver other than the Beosat LM).
CDV refers to a compact disc video player. Press SHIFT, CD for access.

Operating the TV-set close up

The TV-set has two buttons which enable you to switch on and off, and to step through program numbers.

Press the button marked STEP to switch on and to step through all the program numbers on which you have stored a TV station.

Press the button marked ● to switch off, that is to stand-by mode.



Maintenance

Cabinet

The cabinet may be wiped with a dust cloth or with a firmly wrung soft cloth which you have dipped in a solution of water containing a few drops of mild detergent.

Remote control

The remote control may be wiped with a firmly wrung soft cloth which you have dipped in a solution of water containing a few drops of mild detergent.

The three batteries in the remote control should be replaced as required. Use 1.5 V (size AAA - Alkaline) batteries.

Contrast screen

Spray the screen with a window cleaner and wipe it with a dry, soft cloth.

Do not use alcohol or other powerful cleaning fluids to clean any part of the TV-set.

Special note for the UK market

IMPORTANT
The wires in the mains lead supplied with this apparatus are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead may not correspond with the coloured markings identifying the terminals in your unit, proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
Ensure that your equipment is connected correctly. If you are in any doubt, consult a qualified electrician.

International guarantee

This Bang & Olufsen product carries a guarantee against defects in workmanship and materials. The terms of the guarantee apply to the country of purchase but will be met by authorized Bang & Olufsen dealers in other countries. The guarantee period applying to the country of purchase takes priority over guarantee periods applying in other countries, even where differences exist.

In order to obtain service under this guarantee, a certificate stating the following information is required:
– Name of product and type number
– Serial number
– Date of purchase
– Guarantee period
– Dealer's or supplier's signature

If you intend to use your TV-set in a country other than that in which it was bought, it may be necessary for you to have your TV-set modified to suit the TV system used in the country you are moving to. We therefore recommend that you contact your Bang & Olufsen dealer before moving to another country. Any costs incurred in this connection do not fall under the terms of the guarantee.

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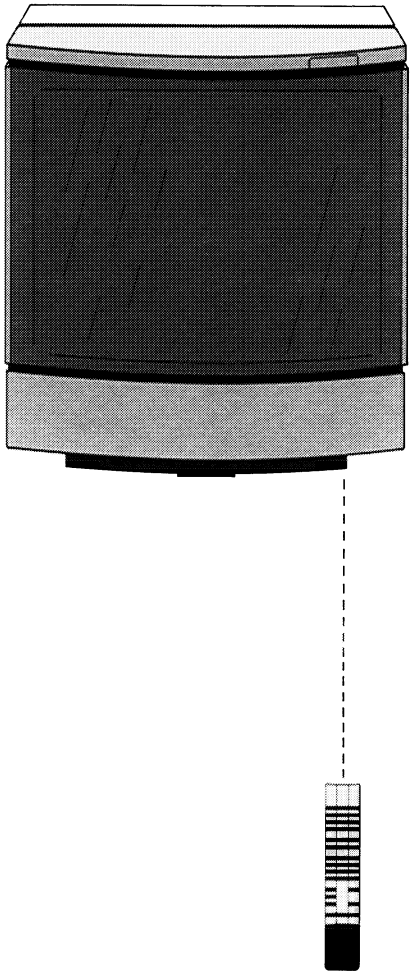
Ingenuity and advanced technology are the key factors in the development of your new Bang & Olufsen TV-set, so naturally it produces picture and sound of exceptional quality. On top of that it has a number of equally important features which make it a versatile and safe investment.

The MX 5000 can form part of a Beolink system in which audio and video products are interconnected and can be operated by the use of one remote control only - the Beolink 1000 terminal supplied with this set.

This manual explains everything you need to know about setting up and operating your TV-set. If your Bang & Olufsen dealer has carried out the setting up and tuning process for you, you can proceed directly to the brief operation guide to familiarize yourself with the day-to-day functions of your TV-set.



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BRIEF OPERATION GUIDE

This brief operation guide explains how to use the primary, day-to-day functions of your MX 5000.

The Beolink 1000 supplied with your MX 5000 is the key to operating the TV-set.

Just make sure that the TV-set is switched on and in the stand-by mode (indicated by a red light in the upper right-hand corner) or you will not be able to use the remote control.

Switch on — Press [TV]

Select preset TV stations — Key in the appropriate number or press [<] or [>] to step through the preset numbers

Key in frequency — Press [GO TO] followed by the frequency

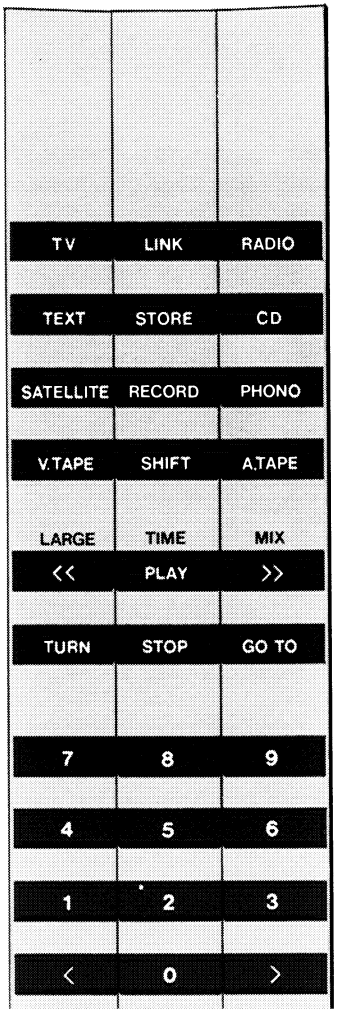
Search for stations — Press [<<] or [>>]

Adjust volume — Press [^] to raise the volume
Press [v] to lower the volume

Mute sound — Press [MUTE]
Press [MUTE] again to recall the sound

Return to preset sound and picture levels — Press [RESET]

Switch on teletext — Press [TEXT]
Switch back to TV viewing — Press [TV]

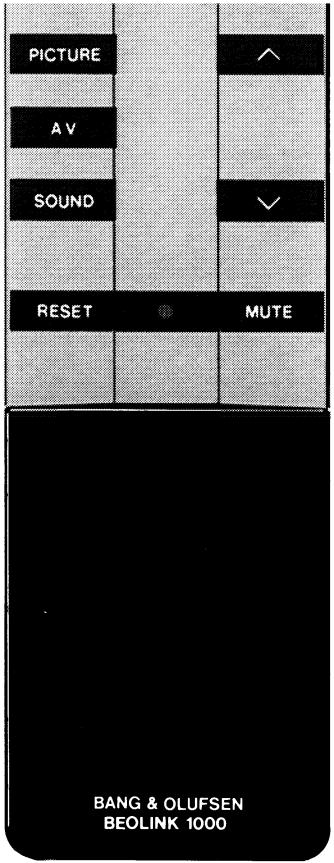


See the current time

Press PLAY
Press PLAY once more for a permanent display
Press PLAY a third time to remove the time display

Switch off

Press ●
The stand-by indicator lights up again



PICTURE AND SOUND ADJUSTMENTS

The TV-set always switches on at specific preset picture and sound levels. These levels may be adjusted, and new preset levels may be stored, if required.

If you adjust the picture and sound values while you are watching TV without storing the new levels, you just have to press RESET to return to the preset levels.

Picture adjustments

Cue		*Factory preset level*
BRILLIANCE	Intensity of light on screen (adjustment range 0 – 31)	20
COLOUR	Saturation of colours (adjustment range 0 – 60)	40
CONTRAST	Difference between black and white (adjustment range 0 – 31)	24

If, while watching TV, you want to see the cues momentarily, press PICTURE one or more times as required.

To adjust brilliance, colour or contrast

1. Press [PICTURE] one or more times until the appropriate cue is visible in the upper left-hand corner of the screen.
2. While the cue is still visible, press [^] or [v] until you reach the desired level.

To preset a new picture level

○ If you want to store the adjusted levels as your new preset picture level, press [STORE] [PICTURE] [STORE].
The cue PICTURE will appear in the upper left-hand corner of the screen, indicating that you are storing the current brilliance, colour and contrast levels.

Sound adjustments

Cue		*Factory preset level*
VOLUME	Volume level (adjustment range 0 – 40)	20
BALANCE	Distribution of sound from the two speakers (adjustment range -8 – 8)	0
TREBLE	High tones (adjustment range -4 – 5)	0
BASS	Low tones (adjustment range -4 – 5)	0
VOLUME HP	Volume level in headphones (adjustment range 0 – 32)	25

If, while watching TV, you want to see the cues momentarily, press SOUND one or more times as required.

To adjust volume

○ The volume level may be adjusted any time during viewing just by pressing [∧] or [∨] as required.

To adjust balance, treble, bass or headphone volume level

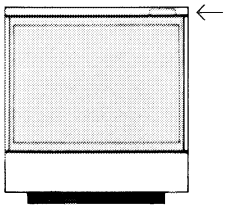
1. Press [SOUND] one or more times until the appropriate cue is visible in the upper left-hand corner of the screen.
2. While the cue is still visible, press [∧] or [∨] until you reach the desired level.

To preset a new sound level

○ If you want to store the adjusted levels as your new preset sound level, press [STORE] [SOUND] [STORE].
The cue SOUND will appear in the upper left-hand corner of the screen, indicating that you are storing the current volume, balance, treble, bass and headphone volume levels.

SPECIAL SOUND FEATURES

The special sound indicator field referred to in this section is located in the upper right-hand corner of the TV-set.



Stereo sound

Your TV-set will automatically reproduce stereo sound when the source, e.g. a TV program or a video tape, is in stereo*.

During stereo sound reproduction, two red arrows are lit in the sound indicator field. The two arrows will also be lit whenever the 21-pin A/V socket or the 7-pin LINE socket is used as sound input, i.e. even if you are playing a video tape recorded with mono sound.

Poor stereo sound due to weak stereo TV signals may be improved by switching to mono.

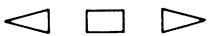
To do so, press TURN.

During mono sound reproduction, no arrows are lit in the sound indicator field.

Press TURN again to return to stereo.

Stereo:

Mono:



*The built-in decoder is designed for stereo reception according to the West German system A2. For reception of the digital stereo system NICAM, your TV-set must be equipped with a NICAM-decoder.

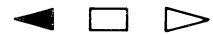
Switching between language A and language B

This function is useful if you are watching a dual language TV program and want to switch from one language to the other.

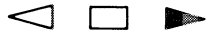
To do so, press TURN.

During reproduction of language A (B), the left (right) arrow is lit in the sound indicator field.

Language A:



Language B:



Enlarging the sound image

The sound image of TV programs can be enlarged by pressing SOUND TURN. This gives you the impression that the speakers are farther apart than they actually are.

If the sound is in stereo, you obtain what is usually referred to as 'enhanced stereo'. If the sound is in mono, however, you obtain what is usually referred to as 'pseudo stereo'.

Press SOUND TURN again to return to normal sound image.

Enlarged sound image can be obtained only if the TV-set is in TV mode, i.e. if you are watching a TV program.

Enlarged sound image:

USING TELETEXT

Teletext provides a wealth of useful information. Just like a book, it consists of an index page and numbered pages which you can look up. The MX 5000 enables you to store the four most frequently watched pages on four memory pages (MEM 1/2/3/4) for quick access.

- ○ Press [TEXT] if you want to switch to teletext.
- ○ Select another source, e.g. [TV], if you want to leave teletext.

Memory pages

When you press [TEXT], one of the four memory pages appears on the screen.

Press [<] or [>] to go to the previous or the following memory page or key in the number of the memory page you want to watch (1, 2, 3 or 4).

You may store any teletext page of your choice on each of these four memory pages:

1. Press [TEXT] to switch to a memory page.
2. Press [GO TO].
3. Key in the page number you want to store, e.g. [1] [1] [2].
4. Press [STORE] once.
5. Key in the figure for the memory page on which you want to store page 112, e.g. [1] for MEM 1, or press [>] or [<] to step to the memory page desired.
6. Press [STORE] a second time.

Repeat this procedure to fill in the remaining memory pages.

The page memory function is applicable on any of the preset numbers from 1 to 32. Provided you have preset a TV station transmitting teletext on each of these 32 numbers, you can, if you like, store a total of 128 (4 x 32) different pages.

The four memory pages of the preset TV station you have last been watching are retained in the memory of the TV-set and can be seen any time after the TV station concerned has suspended its teletext transmissions.

Selecting pages directly

After having switched to teletext you can select one of the numbered pages directly:

1. Press [TEXT] to gain access to teletext.
2. Press [GO TO] to proceed to the page selection function.
3. Key in the page number of your choice using three digits, e.g. [2] [0] [0], or press [>] or [<] to step forwards or backwards through the pages.
4. Repeat step 3 to select other pages.
5. Press [TEXT] if you want to see one of the memory pages.

These simple functions enable you to gain access to all the information available in teletext.

Using the basic teletext functions

Returning to index page 100

○ Press [RESET].

Superimposing the TV picture on the teletext page

○ Press [>>] (=MIX).
○ Press [>>] again to remove the TV picture.

Enlarging the text

○ Press [<<] (=LARGE) to enlarge the upper half of the teletext page.
○ Press [<<] again to enlarge the lower half of the teletext page.
○ Press [<<] a third time to return to normal size.

Retaining a page

○ Press [STOP] to retain the page. The cue STOP will appear at the top of the screen.
○ Press [STOP] again to cancel the STOP instruction.

Revealing concealed text

○ Press [SHIFT] [TURN] to reveal concealed text.
○ Press [SHIFT] [TURN] again to conceal the text.

Using the time function
(This function is applicable only if the page concerned carries a time signal.)

1. Select page number.
2. Press [PLAY] (=TIME).
3. Key in the time you require using four digits, e.g. [0] [9] [0] [0].
4. Press [SHIFT] [GO TO].
   The TV picture will return instantly and the cue FOUND will appear in the upper left-hand corner of the screen at the time you have requested.
5. Press [>>] (=MIX) to look at the page.
6. Press [PLAY] (=TIME) again to cancel the time function.

Using the update function

1. Select page number.
2. Press [SHIFT] [GO TO].
   The TV picture will return instantly, and shortly after the cue FOUND will appear in the upper left-hand corner of the screen.
   If instead the cue UPDATE appears, indicating that the page is being simultaneously updated, proceed to step 4.
3. When the cue FOUND is on the screen, press [SHIFT] [GO TO] to ask for an update reminder.
   The cue FOUND will disappear, and when the page has been updated, the cue UPDATE will appear.
4. Press [>>] (=MIX) to look at the page, or press [TV] to cancel the update function.

While you are waiting for a page to appear at a specified time or for an update, don't forget that the TV-set is still in the teletext mode. This means that the buttons on the remote control are still dedicated to teletext functions.

MAKING YOUR TV-SET READY FOR USE

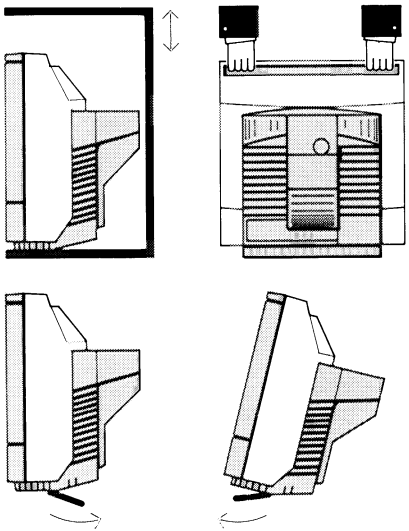
Placement

The TV-set must be placed on a firm surface. Allow a space of at least 5 cm above and to the sides of the TV-set for adequate ventilation.

The TV-set may be placed in an upright position or at a slight tilt backwards. The bracket underneath the TV-set must be turned forwards to make the TV-set tilt. Lift the TV-set to gain access to the bracket.

Special stands designed by Bang & Olufsen are available as optional accessories.

For further details about these, see the section "Connecting and using optional accessories".



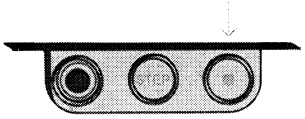
Connection and switching on

(If the TV-set is to be connected to a video recorder, follow the instructions on page 20.)

1. Connect the aerial to the aerial socket on the rear panel of the TV-set.
2. Connect the TV-set to the mains supply with the lead provided.
3. Switch the TV-set to the stand-by mode by pressing the power switch.

The stand-by indicator in the upper right-hand corner lights up, indicating that the TV-set is in stand-by mode and ready to be operated with the remote control terminal.

The power switch is located underneath the loudspeaker panel. The button to the left of the power switch enables you to switch on the TV-set and to step through the preset stations.



Tuning

Just like a radio, your TV-set must be tuned to pick up the stations available in your area. While you search for a station, the frequencies will be displayed at the top of the screen.

In order to avoid going through the tuning process every time you want to watch television, you can preset each station found. The TV-set can store up to 32 different stations in its memory on the preset numbers 1-32.

The TV-set is equipped to receive both PAL/SECAM B/G signals (used in most European countries) and SECAM L signals (used in France only). TV-sets sold in the UK are also equipped to receive PAL I TV signals.

Press TV *to switch on the TV-set before you start the tuning process.*

→

Tuning by automatic search
This tuning procedure may be used if you don't know on which frequencies to find the stations available in your area.

1. Press [<<] or [>>] once to start searching for a station.
2. Wait for the TV-set to find a station.
3. Press [<<] or [>>] once more if this is not the station you want.
4. If necessary, press [SHIFT] [3] to switch to the PAL I, the PAL/SECAM B/G (indicated by B) or the SECAM L (indicated by L) TV system.
5. If you need to fine tune, press [GO TO] and then [<<] or [>>] until the picture is clear and stable.
6. Press [STORE] once.
7. Key in the number on which you want to preset the station you have found.
8. Press [STORE] a second time to preset the station.

Repeat this procedure to find and preset other stations.

Tuning by direct frequency selection
This tuning procedure may be used if you know on which frequencies to find the stations available in your area.

1. Press [GO TO].
2. Key in the appropriate figure for the frequency of your choice, using three digits (e.g. 075 for 75 MHz).
3. If necessary, press [SHIFT] [3] to switch to the PAL I, the PAL SECAM B/G (indicated by B) or the SECAM L (indicated by L) TV system.
4. If you need to fine tune, press [GO TO] followed by [<<] or [>>] until the picture is clear and stable.
5. Press [STORE] once.
6. Key in the number on which you want to preset the station.
7. Press [STORE] a second time to preset the station.

Repeat this procedure to find and preset other stations.

Displays appearing during tuning

The following displays appear when you carry out the tuning process.

P followed by a number (1-32) indicates the current preset number (used for storing a specific frequency).

F followed by three digits indicates the frequency in Megahertz (MHz) without decimals. The frequency scale on this TV-set ranges from 45 to 855 MHz.

FT followed by a plus or a minus indicates a fine tuning in progress.

B indicates that the TV-set is set for the PAL I (UK only) or the PAL/SECAM B/G TV system.

L indicates that the TV-set is set for the SECAM L TV system.

M indicates that the TV-set is set for the American NTSC colour system. This facility is available only if your TV-set has been equipped with an NTSC decoder.

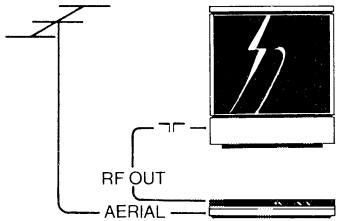
A/V indicates that the preset number concerned has been prepared for video playback (cf. the paragraph "Tuning the TV-set for video playback").

If, while watching TV, you want to see the displays momentarily, press TV.

USING A VIDEO

Connecting the video to the TV-set

1. Connect the aerial to the aerial *input* socket on the video.
2. Connect one end of the aerial cable supplied with the video to the aerial *output* socket on the video.
3. Connect the other end of the aerial cable to the aerial socket on the TV-set.



For A/V connection between the video and the TV-set, use a 21-pin A/V cable. If you use a 21-pin A/V cable, you do *not* have to tune the TV-set for video playback. You can show a video tape on any of the 32 preset numbers of your TV-set.

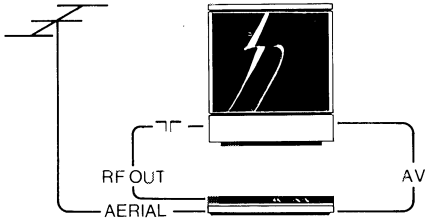
Compatible Bang & Olufsen video recorders

If the video is connected to the TV-set by *both an aerial cable and a 21-pin A/V cable,* any of the following Bang & Olufsen videos may be operated with the Beolink 1000 remote control.

Beocord VX 5000
Beocord VHS 91.2
Beocord VHS 91*
Beocord VHS 82.2
Beocord VHS 82
Beocord VHS 66*
Beocord VHS 63

○ Press V.TAPE to switch on the video. The TV-set now switches on automatically.
○ Press PLAY to start playing the video tape.

○ Press TV to switch to a TV program without stopping the video tape.
○ Press V.TAPE again to return to the video program.



*Minor modification of the video required

Tuning the TV-set for video playback

If the video is connected to the TV-set by an *aerial cable only*, you must prepare one of the TV-set's preset numbers for video playback.

1. Start playing a video tape on the video.
2. Switch on the TV-set by pressing [TV].
3. Select an unused preset number on the TV-set.
4. Press [>>] to start searching for the frequency on which the video is sending its playback signals (usually within the 540-630 MHz range).
5. Wait for the TV-set to find the frequency. When the TV-set has found the correct frequency, the video recording appears on the screen.
6. You may have to repeat step 4 and 5 until the TV-set finds the correct frequency.
7. If fine tuning is required, press [GO TO] and then [<<] or [>>] until you obtain a clear picture.
8. Press [SHIFT] [2] to remove any flickering in the picture.
   The cue A/V will appear at the top of the screen.
9. Press [STORE] twice to preset the video frequency.

The [SHIFT] [2] instruction can be cancelled by pressing [SHIFT] [2] again.

Whenever you want to watch a video tape, remember to select the preset number you have prepared for video playback.

SOCKETS ON REAR PANEL

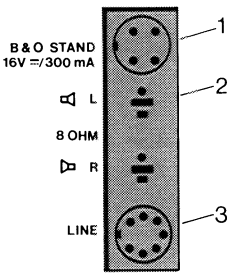
1. Socket for the MS 5000 (motorized stand) or the MB 5000 (motorized base).

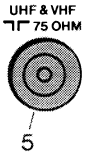
2. Sockets for auxiliary loudspeakers. R for right speaker, L for left speaker.

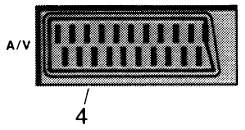
3. LINE, input and output socket for Beolink connection.

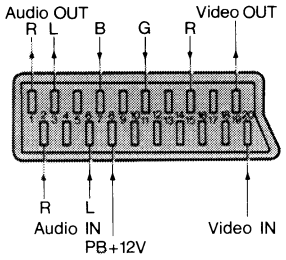
4. 21-pin A/V input and output socket for audio/video equipment, e.g. a video tape recorder.

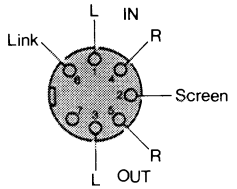
5. Socket for 75 ohm aerial.











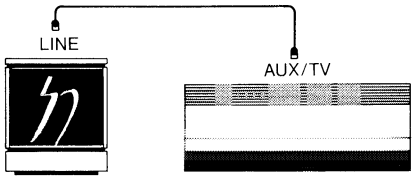
THE MX 5000 IN A BEOLINK SYSTEM

What is a Beolink system?

A Beolink system is a system containing both audio and video products which are interconnected. Using one remote control only, you can operate the video system through the audio master or operate the audio system through the video master. This means that you can hear a TV program through the audio speakers or listen to the radio through the TV speakers.

The MX 5000 is a Beolink master. By connecting it to a Beolink compatible Beomaster/Beocenter you can obtain the special Beolink functions.

○ Connect the Beomaster/Beocenter to the LINE socket on the rear panel of the MX 5000 using a 7-pin DIN cable (Beolink cable).



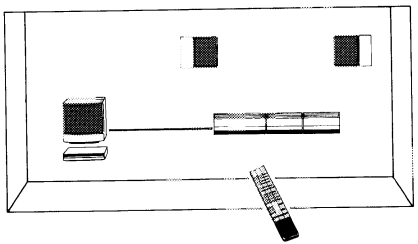
The Beolink cable is available in different lengths:

Part no.
6270222 black, 1.5 m
6270353 black, 5 m
6270337 black, 10 m
6270354 black, 20 m
6270338 (extension cable), 1.5 m

Part no.
6270393 grey, 1.5 m
6270394 grey, 5 m
6270395 grey, 10 m
6270396 grey, 20 m

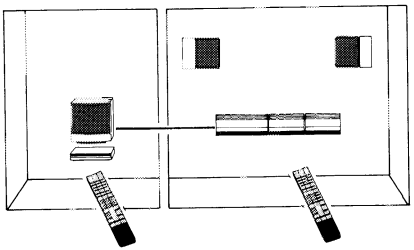
The Beolink system may be set up in two ways to suit individual patterns of use:

Situation 1



The video and audio systems are placed close to each other so that the commands from the Beolink 1000 can be received by both systems at the same time.

Situation 2



The video and audio systems are placed far apart, e.g. in separate rooms, so that the commands from the Beolink 1000 can be received by only one system at a time.

Pre-programming

Both the video and audio masters in a Beolink system must be pre-programmed according to the chosen set-up. Use the Beolink 1000 terminal to pre-program the MX 5000, which *must be in stand-by mode during pre-programming.*

Situation 1 (option 1):

Press PICTURE 1 STORE

The stand-by indicator flickers momentarily as an indication that the command has been received.

Situation 2 (option 2):

Press PICTURE 2 STORE

The stand-by indicator flickers momentarily as an indication that the command has been received.

Master Control Link 2
The MX 5000 can also be pre-programmed for Master Control Link 2 system set-ups (*TV-set must be in stand-by mode*):

- If the TV-set is to operate as a master TV-set in the MCL 2 system, press [PICTURE] [5] [STORE].
- If the TV-set is to operate as a slave TV-set in the MCL 2 system, press [PICTURE] [6] [STORE].

The stand-by indicator flickers momentarily as an indication that the command has been received.

For further information about how to use your TV-set in an MCL 2 system, please refer to the special MCL manuals.

How to obtain the Beolink functions

If your Beolink system is set up according to *situation 2*, you can operate the audio or video system as usual to obtain the Beolink functions.

If, however, your Beolink system is set up according to *situation 1*, you must use the [AV] button on the Beolink 1000 to obtain the Beolink functions. The [AV] button relays the commands following the [AV] command from one system to the other. For example, if you press [AV] and then [TV], the TV-set will switch on, but the sound from the TV program will be reproduced by the audio speakers. If you press [AV] and then [CD] you will hear the music from the compact disc player in the TV speakers.

CONNECTING AND USING OPTIONAL ACCESSORIES

The accessories referred to in this section are all available as optional extras from your Bang & Olufsen dealer.

Headphones

The Bang & Olufsen Form 1 or Form 2 headphones can be connected to the TV-set via the headphones socket on the front in the lower right-hand corner. When you use headphones, the volume level in the headphones and the volume level in the built-in speakers of the TV-set can be adjusted individually. Press MUTE if you want to mute the sound in the built-in loudspeakers.

See page 9 for information about volume control in headphones.

Auxiliary speakers

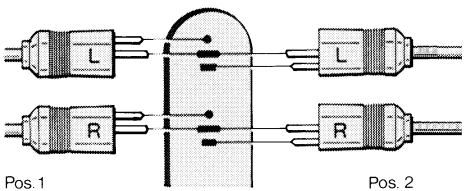
Auxiliary speakers (8 ohm) can be connected to the TV-set via the speaker sockets on the rear panel (L for left speaker, R for right speaker).

If you connect the speakers as in pos. 1 on the illustration, both sets of speakers (auxiliary and built-in) are cut in.

If you connect the speakers as in pos. 2 on the illustration, the built-in speakers are cut out.

Any adjustment of sound, e.g. volume or balance adjustment, also applies to the sound produced by the auxiliary speakers.

Avoid placing the loudspeakers too close to the TV-set as this may affect the picture quality adversely.



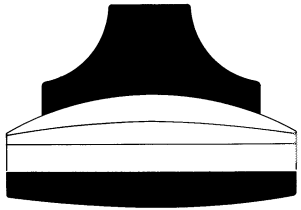
Stands

Ideal placement of the MX 5000 is on the ST 5000, the MS 5000 (a motorized stand) or the MB 5000 (a motorized base). The socket marked B&O STAND on the rear panel of the TV-set is for connecting the MS/MB 5000.

Your video recorder and/or satellite receiver, if any, can be placed underneath the TV-set on shelves which can be purchased separately and fixed to the ST 5000/MS 5000.

If your MX 5000 is placed on the MS/MB 5000, you can use the Beolink 1000 to turn the TV-set from its neutral position so that it faces your viewing position.

- Press [PICTURE] and press and hold down [<] or [>] to turn the TV-set in the direction required.
- You can also store your favourite viewing position in the memory of the TV-set, so that the TV-set will automatically turn to that position when you switch it on. Press [STORE] [PICTURE] [STORE] to store the viewing position.
  NOTE! When you store the viewing position you simultaneously store all other current picture levels (BRILLIANCE, COLOUR and CONTRAST).
- Press [●] to switch off the TV-set and turn it to its neutral position.



For further information about accessories, please consult your Bang & Olufsen dealer.

MAINTENANCE

Cabinet

Wipe dust off the TV-set using a dry, soft cloth.

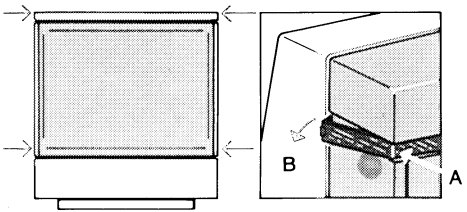
Remove grease stains or more persistent dirt using a soft cloth moistened with a little diluted mild detergent. Wring the cloth firmly before use.

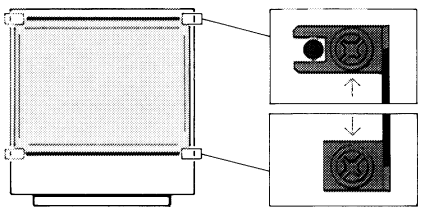
Never use denatured alcohol to clean your TV-set.

Contrast screen

After some time (usually years) particles may penetrate the space behind the contrast screen, forming a thin film of dirt on its inner surface. This may affect the clarity of the picture adversely, and the screen should be removed and cleaned:

- First remove the upper and lower plastic strips:
  Press the strip firmly in one side (A).
  Carefully grip the end of the strip (B) and pull it out completely.
  When you have removed both strips, the four screws holding the contrast screen become accessible.
  Loosen the two lower screws and one of the two upper screws.
  Hold the contrast screen firmly while loosening the fourth and final screw.
- Once the contrast screen is detached, clean both sides of the contrast screen and the surface of the picture screen using a soft cloth moistened with a little diluted mild detergent. Wring the cloth firmly before use.



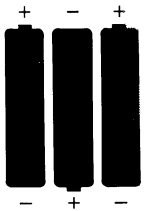


○ To replace the contrast screen, use the removal procedure in reverse order.
○ Remove any resulting finger marks with a soft cloth.

Remote control

The remote control may be wiped with a soft cloth moistened with a little diluted mild detergent. Wring the cloth firmly before use.

When the three batteries in the remote control are flat, replace them using 1.5 V (size AAA - Alkaline) batteries.



LIST OF FREQUENCIES

This TV-set uses frequencies as reference for tuning. The advantage of this system is that you can select with great precision any frequency on which a TV station or cable TV is transmitting. Such built-in flexibility ensures that the TV-set can cope with variations in transmission practices. This list of frequencies gives you the usual channel designations and their corresponding frequencies.

VHF standard:

Channel designation no	On-screen display MHz	Channel designation no	On-screen display MHz	Channel designation no	On-screen display MHz	Channel designation no	On-screen display MHz
E2	48	E10	210	S 5	133	S13	245
E3	55	E11	217	S 6	140	S14	252
E4	62	E12	224	S 7	147	S15	259
E5	175			S 8	154	S16	266
E6	182	S1	105	S 9	161	S17	273
E7	189	S2	112	S10	168	S18	280
E8	196	S3	119	S11	231	S19	287
E9	203	S4	126	S12	238	S20	294

UHF standard:

Channel designation no	On-screen display MHz	Channel designation no	On-screen display MHz	Channel designation no	On-screen display MHz	Channel designation no	On-screen display MHz
21	471	34	575	46	671	58	767
22	479	35	583	47	679	59	775
23	487	36	591	48	687	60	783
24	495	37	599	49	695	61	791
25	503	38	607	50	703	62	799
26	511	39	615	51	711	63	807
27	519	40	623	52	719	64	815
28	527	41	631	53	727	65	823
29	535	42	639	54	735	66	831
30	543	43	647	55	743	67	839
31	551	44	655	56	751	68	847
32	559	45	663	57	759	69	855
33	567						

Deviations from VHF standard:

Ireland

Channel designation no	On-screen display MHz
IA	45
IB	53
IC	61
ID	175
IE	183
IF	191
IG	199
IH	207
IJ	215

Australia

Channel designation no	On-screen display MHz
0	46
1	57
2	64
3	86
4	95
5	102
5a	138
6	175
7	182
8	189
9	196
10	209
11	216

New Zealand

Channel designation no	On-screen display MHz
1	45
2	55
3	62
4	175
5	182
6	189
7	196
8	203
9	210

INTERNATIONAL GUARANTEE

This Bang & Olufsen product carries a guarantee against defects in workmanship and materials. It is a national guarantee, extended by Bang & Olufsen to the country in which the product was bought. The terms of the guarantee apply principally to the country of purchase but will be met by authorized Bang & Olufsen dealers in other countries. The guarantee period applying to the country of purchase takes priority over guarantee periods applying in other countries, even where differences exist.

In order to obtain service under this guarantee, a certificate stating the following information is required:

- Name of product and type number
- Serial number
- Date of purchase
- Guarantee period
- Dealer's or supplier's signature

If you intend to use your TV-set in a country other than that in which it was bought, it may be necessary for you to have your TV-set modified to suit the TV system used in the country you are moving to. We therefore recommend that you contact your Bang & Olufsen dealer before moving to another country. Any costs incurred in this connection do not fall under the terms of the guarantee.

Please note that your TV-set is not approved for use in the USA and Canada and must not be modified with this purpose in view.

Bang & Olufsen
DK-7600 Struer
DENMARK

SPECIAL NOTE FOR THE UK-MARKET

IMPORTANT!
The wires in the mains lead supplied with this apparatus are coloured in accordance with the following code:

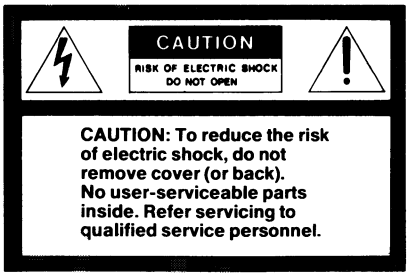
BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured BLACK.

- The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured RED.

Ensure that your equipment is connected correctly. If you are in any doubt, consult a qualified electrician.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.

This symbol indicates that a dangerous voltage constituting a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

WARNING:

- To prevent fire or electric shock, do not expose this appliance to rain or moisture.

Your TV-set and VCR operate on 120 volts, 60 Hz (normal household current) and each have a polarized plug. Because one blade of the plug is wider than the other, the plug fits in the wall socket only one way. Do not defeat the safety feature of this plug. If you need an extension, use a polarized cord.

Caution: To prevent electric shock do not use the polarized plug on the TV-set and the VCR with an extension cord, receptacle, or other outlet unless the blades can be fully inserted to prevent blade exposure.

Note to Cable TV Installer: This reminder is provided to call your attention to Article 820-22 of the National Electrical Code (Section 54 of Canadian Electrical Code, Part 1) which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

We recommend that you read this manual and the enclosed safety instructions before turning on your TV-set and VCR for the first time.

This Bang & Olufsen product carries a guarantee against defects in workmanship and materials.

In order to obtain service under this guarantee, a document stating the following information is required:

- name of product and type number
- serial number
- date of purchase
- guarantee period
- dealer's or supplier's signature

For servicing of the product in USA, contact your local Bang & Olufsen dealer, or Bang & Olufsen of America Inc., 1150 Feehanville Drive, Mt. Prospect, Illinois 60056.

For servicing of the product in Canada, contact your local Bang & Olufsen dealer, or Lenbrook Industries Ltd., 633 Granite Court, Pickering, Ontario L1W 3K1.

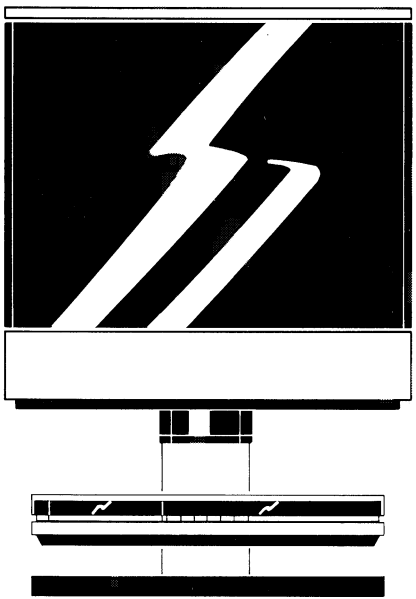
For optimum performance your Video System 5000 must be installed and programmed according to the instructions on page 10 to 27 in this manual.

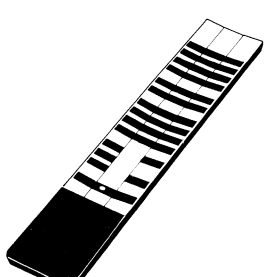
If your dealer has carried out this installation and programming procedure for you, you may rely on the brief operating guide at the beginning of this manual to tell you how to use the simple, day-to-day functions in your system.

To gain full benefit of the system, however, we suggest you read through all the sections in this manual pertaining to the operation of your Video System 5000.

For a quick survey of all the features and functions available to you, we suggest that you refer to the Table of Contents or to the alphabetical index at the end of the manual.

Video System 5000:
Beovision® MX 5000
Beocord® VX 5000
Motorized stand MS 5000
Beolink® 1000





Thank you for choosing Bang & Olufsen

We are pleased with your decision to bring our audio/video components into your home. Your selection of Bang & Olufsen tells us that we share many attitudes regarding the level of sophistication home electronics should be expected to demonstrate.

As you are likely aware, Bang & Olufsen believes the most advanced audio and video technology is of trifling value if complexity impedes its use and constricts its benefits. In implementing this philosophy we have attempted to provide a seamless integration of our audio and video components.

Our integrated systems are designed so that the single Beolink 1000 remote terminal places control of every audio and video source comfortably in your hand. Further, our Master Control Link system enables you to enjoy your system's audio and video sources in any or every room in your home. Regardless of which Bang & Olufsen system or component you have recently purchased, you will always be able to increase the benefits it offers whenever you choose to do so.

You will find that the design of Bang & Olufsen's audio and video components will often draw comment from those who visit your home. While it is true that our products have garnered worldwide recognition for their design excellence, they have not been created for the museums and aesthetic communities which honor them. Rather, they have been developed solely to enrich the time you spend in your home. Their purpose is to give you effortless access to all the arts such components now make available. The refreshingly decent design our products enjoy is simply a natural result of this quest for simplicity and accessibility.

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MX 5000 TV-set

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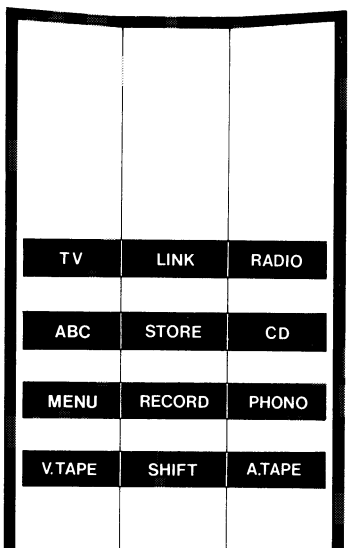
Last seen channel — 0

Switch between Antenna, Cable-TV and Decoder — ABC

Switch Stereo/Mono/ SA (Second Audio) — TURN

Mute/unmute sound — MUTE

Mute/unmute picture — PICTURE MUTE

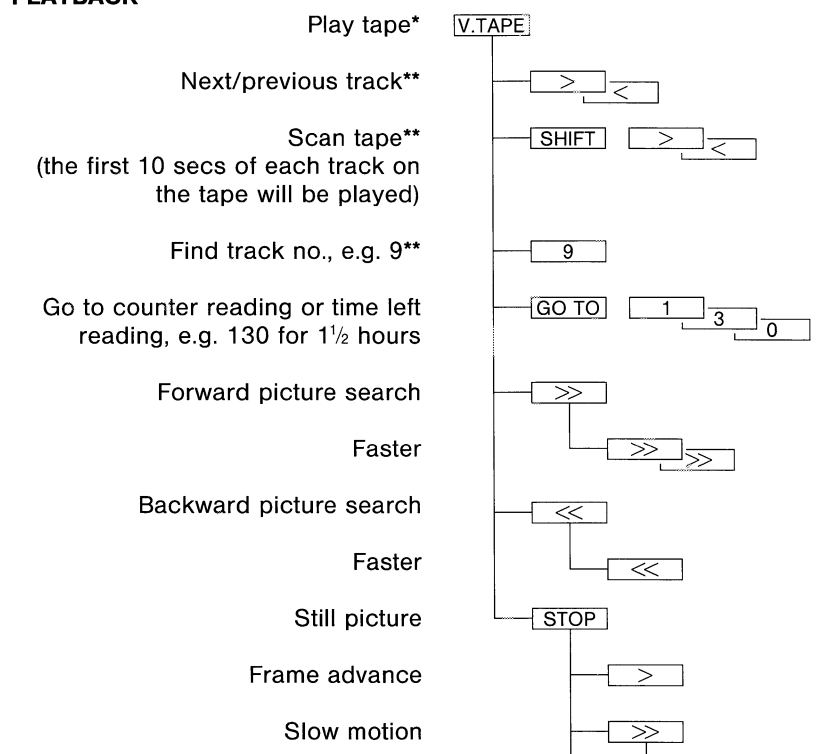


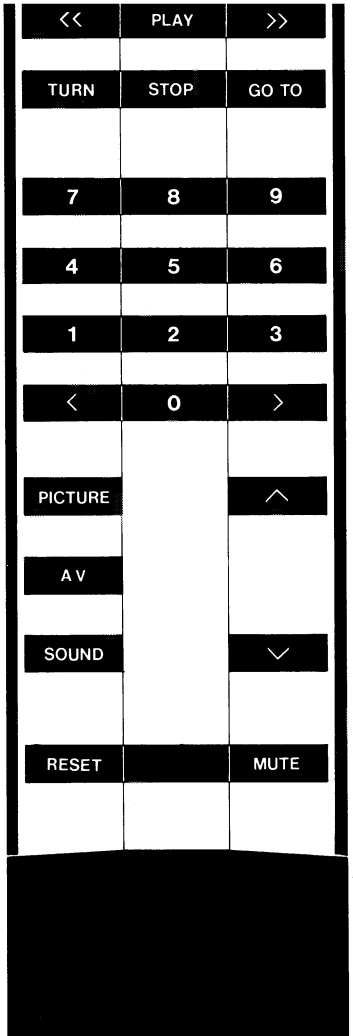
For a brief display of date and time press PLAY once.

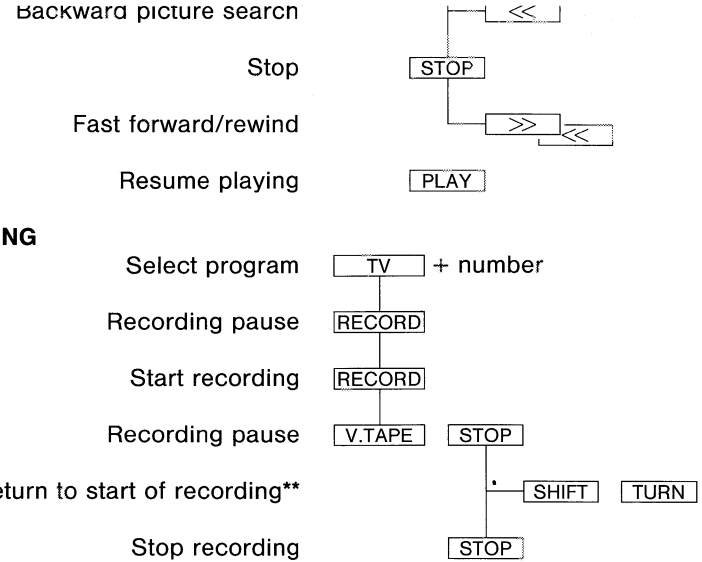
If you press PLAY a second time, the date will disappear, whereas the time display will remain on the screen. Press PLAY again to display both date and time again. The display disappears automatically within three seconds.

VX 5000 VCR

PLAYBACK







* If your VX 5000 VCR is connected to the phono sockets marked AV2 on the TV-set, press SHIFT, then V.TAPE to switch on the VCR.

**If you want to use the track search or recording return functions, the 'Track marker' in the 'Basic setup' submenu must be set to 'On' (see page 48) during recording.

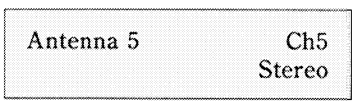
How to read the status lines

The status lines appearing at the top of the screen give you information about the TV channel you are currently watching. The status lines appearing at the bottom of the screen give you information about the current status of the VCR.

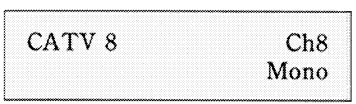
The status lines remain on the screen for a few seconds, then disappear automatically.

The following list of status lines reflects the variety of information read out by the system. The list does not contain all the different status lines you may see on your screen.

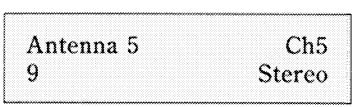
TV status lines (top of screen)
By pressing TV you can obtain a status line for the channel the TV-set is currently tuned to.



Channel 5, antenna broadcast, on program number 5, stereo sound reception.



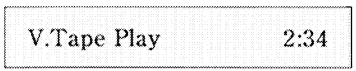
Channel 8, cable-TV transmission, on program number 8, mono sound reception. If you have two cable-TV inputs, they will be identified by an A and a B: CATV A and CATV B.



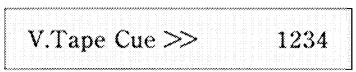
This status line appears while you are keying in a number, e.g. 9, to switch from channel 5 to channel 9.

Channel 10, cable-TV transmission, on program number 5, Second Audio program. (See the paragraph "Presetting channels on specific program numbers" on page 31 for details about presetting channels on program numbers of your own choice.)

VCR status lines (bottom of screen)
The VCR status lines appear whenever you switch from one function to another.

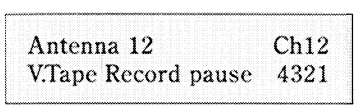


The video tape is playing - 2 hours and 34 minutes of playing time is left on the tape (clock indicated by a colon).

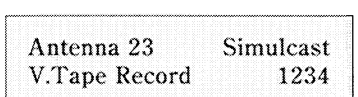


Forward picture search in progress - counter is running (counter indicated by four digits).

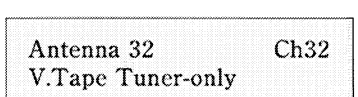
Forward track search or fast forwarding in progress - track numbers counting upward (track numbers indicated by two digits).



Recording pause mode - channel 12 on program number 12 will be recorded - counter at 4321.



Simulcast recording (see page 52) - program number 23 on antenna input - counter at 1234.



Tuner-only mode (see page 50) - channel 32 on program number 32.

INSTALLING THE VIDEO SYSTEM

Placement

The MX 5000 TV-set must be placed on a solid surface, e.g. a table or the floor. Allow a space of at least 2" above and to the sides of the TV-set for adequate ventilation. Do not place any heat-producing equipment immediately above the TV-set.

The TV-set may be placed in an upright position or at a slight backward tilt. Pull out the bracket underneath the TV-set to make it tilt.

Place the VX 5000 VCR on a solid surface, e.g. a table or shelf. Allow a space of at least 2" at the sides and behind the VCR and approximately 8" above it for adequate ventilation. Do not place the VX 5000 on a carpet as this could block the ventilation holes on the base.

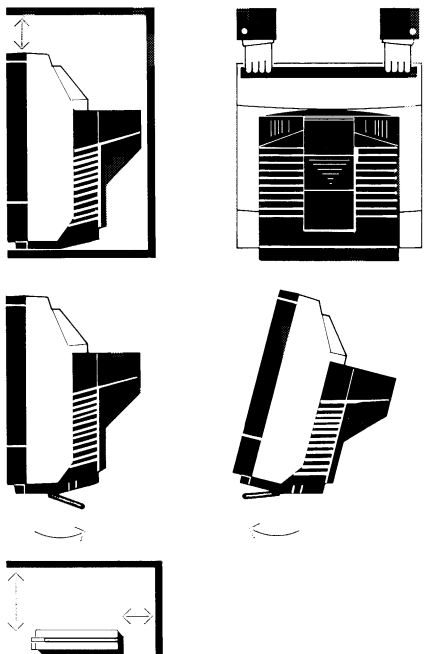
Ideal placement of the MX 5000 and VX 5000 is on a Bang & Olufsen stand designed specifically for the Video System 5000:

- ST 5000 stand + shelf for VX 5000
- MS 5000 stand + shelf for VX 5000
- MB 5000 base, for MX 5000 alone

The MS 5000 stand and the MB 5000 base are both equipped with a motor enabling you to turn the TV-set by up to 35° to the left or to the right to suit your viewing position using the remote terminal.

The MS 5000 or the MB 5000 must be connected to the socket marked B&O STAND on the MX 5000 TV-set.

Please refer to the paragraph "Changing the viewing direction" on page 36 for further instructions.



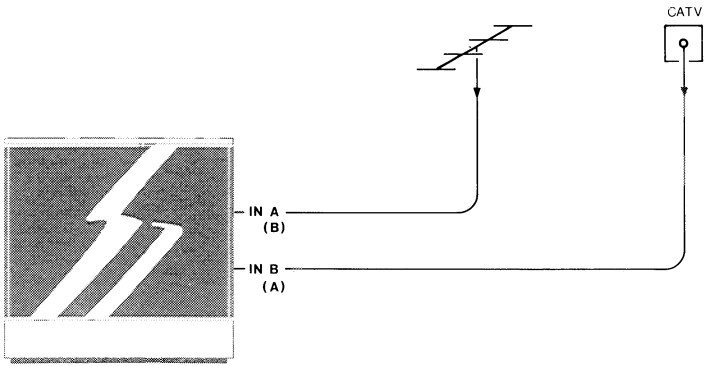
Hooking up

The hooking up procedure must be carried out in the following sequence:

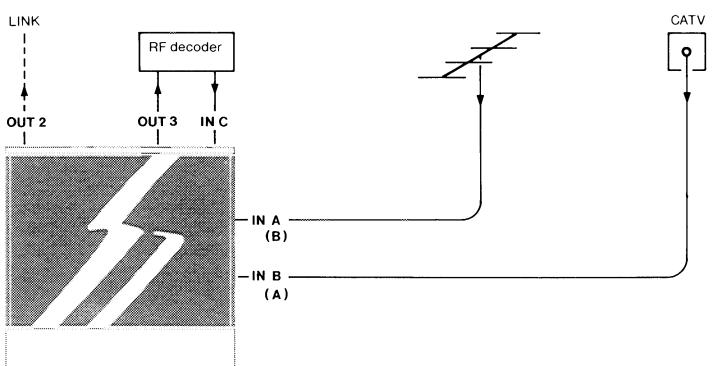
1. Refer to the table and find the setup code (1-12) which applies to your system, e.g. 8 if you have both antenna and cable-TV (CATV) at your disposal and if your system consists of the MX 5000 TV-set, the VX 5000 VCR and one decoder for scrambled TV programs.
2. Find the corresponding setup diagram (1-12) on one of the pages 12 to 18.
3. Hook up your system in accordance with the diagram, using the cables and accessories indicated.
4. Make a note of the setup code applying to your system - you'll need it when you are programming the system (cf. the paragraph "Setting up" on page 26).

Video System:	*Setup code:*
Antenna only	
MX 5000 alone	**1**
MX 5000 + VX 5000 (normal signals)	**2**
MX 5000 + VX 5000 (strong signals)	**3**
Cable-TV input only	
MX 5000 alone	**1**
MX 5000 + 1 RF decoder	**1**
MX 5000 + VX 5000	**4**
MX 5000 + VX 5000 + 1 RF decoder	**5**
MX 5000 + VX 5000 + 2 RF decoders	**6**
Antenna + one cable-TV input	
MX 5000 alone	**1**
MX 5000 + VX 5000	**7**
MX 5000 + VX 5000 + 1 RF decoder	**8**
MX 5000 + VX 5000 + 2 RF decoders	**9**
Two cable-TV inputs	
MX 5000 alone	**1**
MX 5000 + VX 5000	**10**
MX 5000 + VX 5000 + 1 RF decoder	**11**
MX 5000 + VX 5000 + 2 RF decoders	**12**

1 (a)
Cables/accessories required:
– one or two RF cables



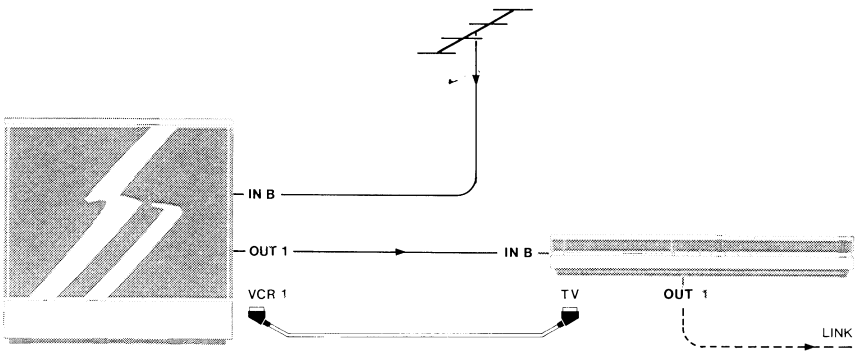
1 (b)
Cables/accessories required:
– four RF cables



2

Cables/accessories required:

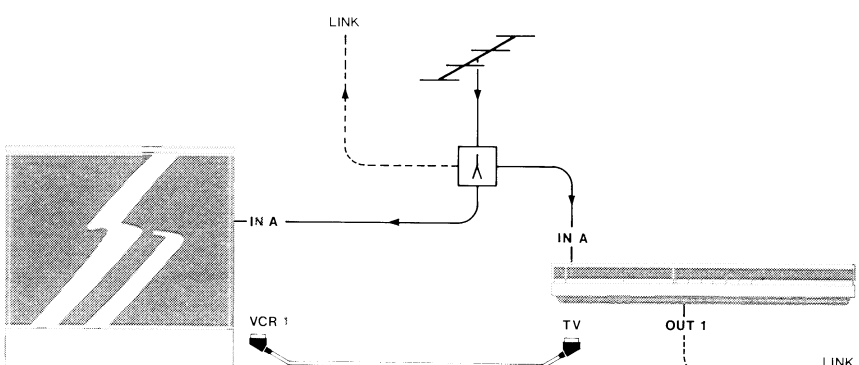
- two RF cables
- one 21/21-pin AV cable



3

Cables/accessories required:

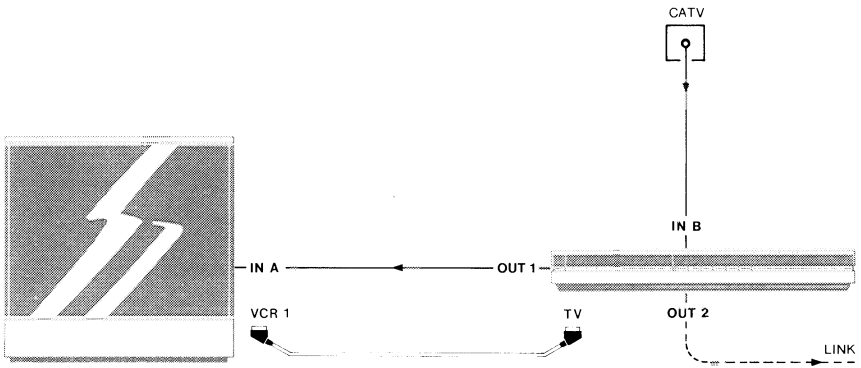
- one antenna splitter
- three RF cables
- one 21/21-pin AV cable



4

Cables/accessories required:

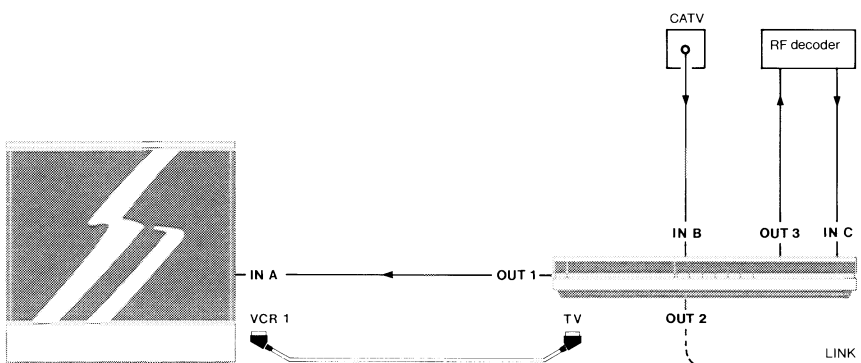
– two RF cables
– one 21/21-pin AV cable



5

Cables/accessories required:

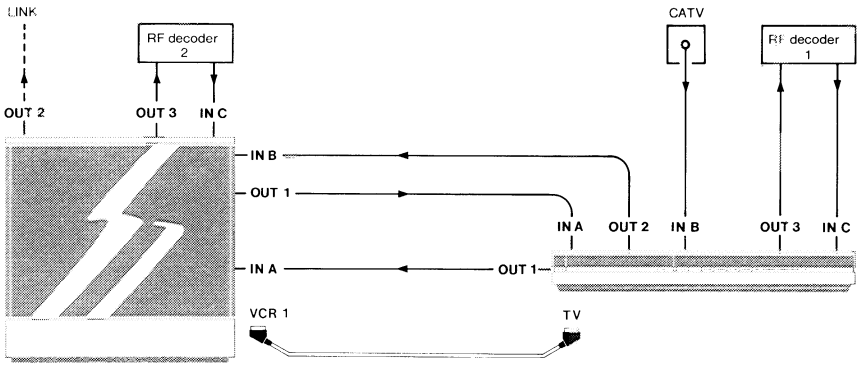
– four RF cables
– one 21/21-pin AV cable



6

Cables/accessories required:

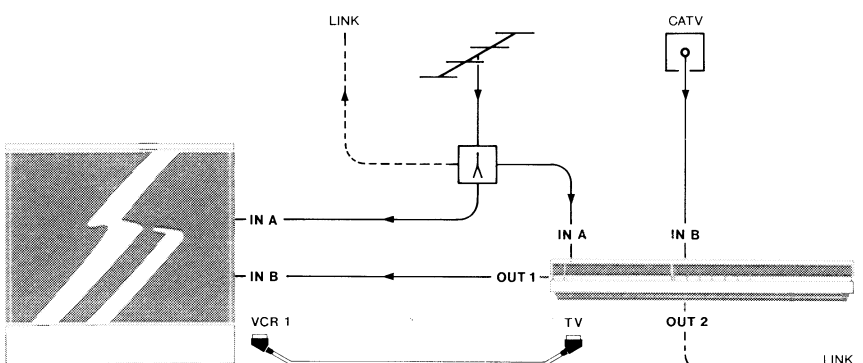
- eight RF cables
- one 21/21-pin AV cable



7

Cables/accessories required:

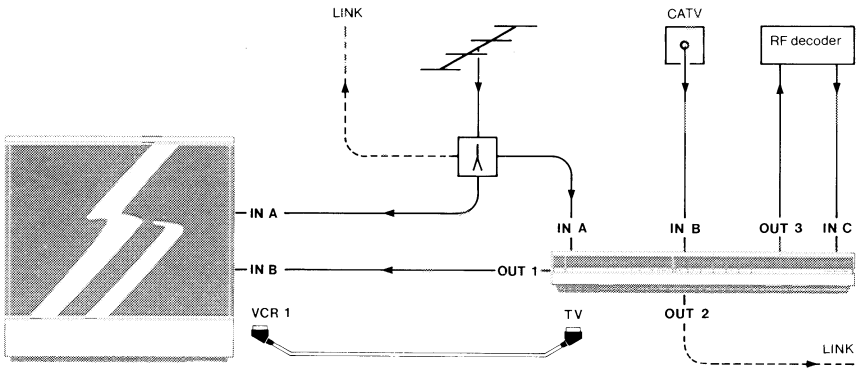
- one antenna splitter
- five RF cables
- one 21/21-pin AV cable



8

Cables/accessories required:

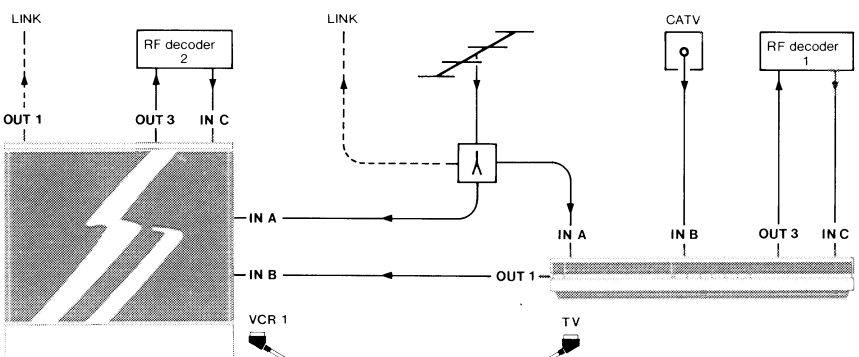
- one antenna splitter
- seven RF cables
- one 21/21-pin AV cable



9

Cables/accessories required:

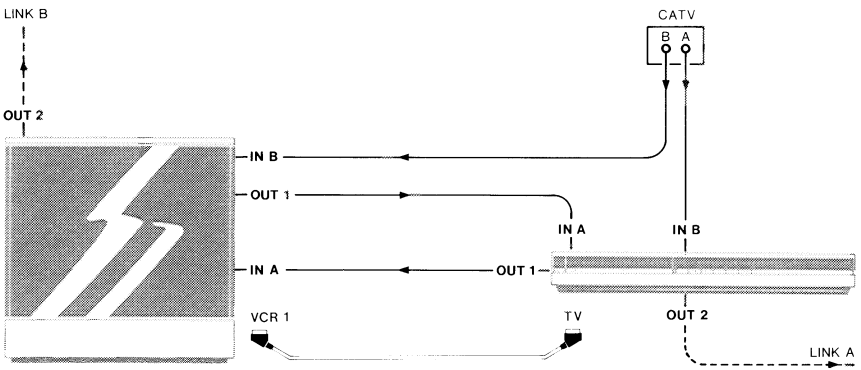
- one antenna splitter
- nine RF cables
- one 21/21-pin AV cable



10

Cables/accessories required:

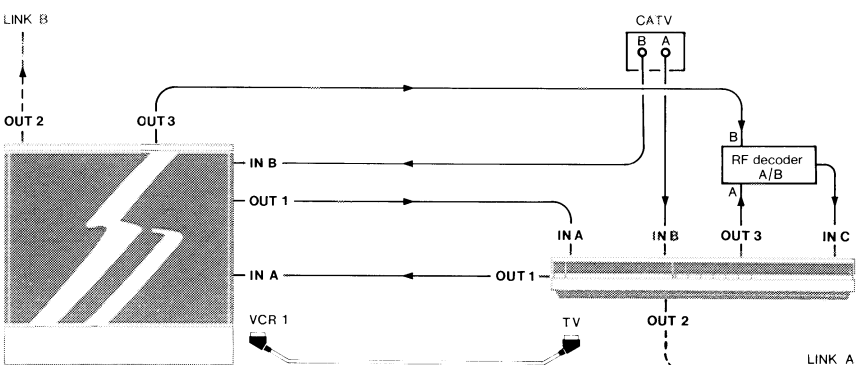
– four RF cables
– one 21/21-pin AV cable



11

Cables/accessories required:

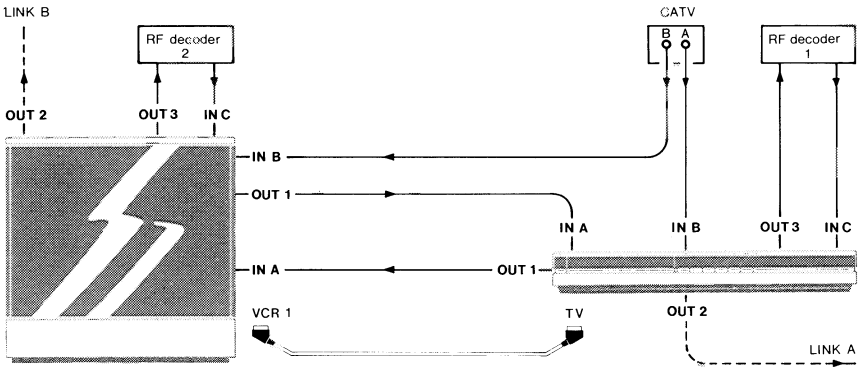
– seven RF cables
– one 21/21-pin AV cable



12

Cables/accessories required:

- eight RF cables
- one 21/21-pin AV cable



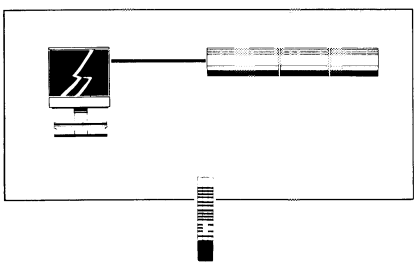
Beolink connections

The Video System 5000 can be used as a full-fledged member of a Bang & Olufsen Beolink system. In a Beolink system audio and video products are interconnected and they can all be operated using the Beolink 1000 terminal.

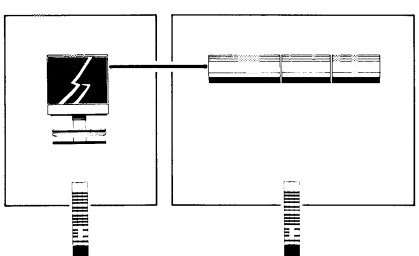
If your Video System forms part of such a Beolink system, you obtain a number of facilities called Beolink functions, e.g. hearing the sound track of a video recording through the speakers belonging to the audio system or recording the FM stereo sound of simulcast programs on the video tape.

Please consult your dealer for details about compatible Bang & Olufsen audio systems.

The Beolink system may be set up in two ways, according to individual usage patterns:



1. The video system and the audio system are placed close together so that both systems are simultaneously within remote control range of the Beolink 1000. This setup is referred to as an option 1 setup.



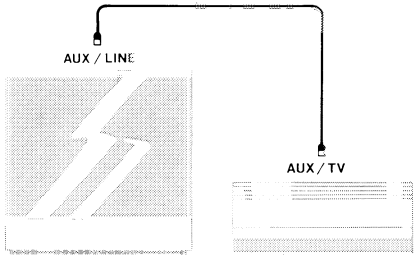
2. The video system and the audio system are placed far apart, e.g. in separate rooms, so that the commands from the Beolink 1000 can be received only by one system at a time. This setup is referred to as an option 2 setup.

→

Hook up the system in accordance with the diagram, using a Beolink cable.

Beolink cables:
6270222, black, 5'
6270393, gray, 5'
6270353, black, 16'
6270394, gray, 16'
6270337, black, 33'
6270395, gray, 33'
6270354, black, 66'
6270396, gray, 66'
6270338 (extension cable), 5'

For details about operating the Beolink system, please refer to the separate Beolink 1000 manual.



Connecting extra loudspeakers

The Video System 5000 has been designed to reproduce the highest sound quality by connecting extra loudspeakers to it.

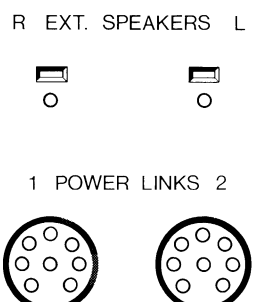
The MX 5000 TV-set features two different connections on the rear panel for extra loudspeakers:

R EXT. SPEAKERS L
Passive loudspeakers, e.g. the Beovox RL 60.2 or Beovox 3000/5000; R for right-hand speaker, L for left-hand speaker.

If you connect passive speakers to the MX 5000 TV-set, the internal speakers will be cut out.

1 POWER LINKS 2
Active loudspeakers with Power Link facility, e.g. the Beolab 3000/5000 or Beolab Penta (with video switch); both left and right channel information in each socket.

See the paragraph "Speaker setup" on page 28 for details about switching speakers.

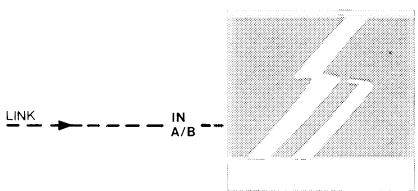


For optimum picture quality we recommend that you do not place the loudspeakers closer than approximately 6' to the TV-set.

Connecting a second MX 5000 TV-set in another room

The connection marked LINK shown on each of the 12 setup diagrams (except 1a) is for connection of a second MX 5000 TV-set. This means that you can distribute picture and sound from the central Video System to this local TV-set.

Hook up the local TV-set in accordance with the diagram, using an RF cable.



HOW TO USE THE ON-SCREEN MENUS

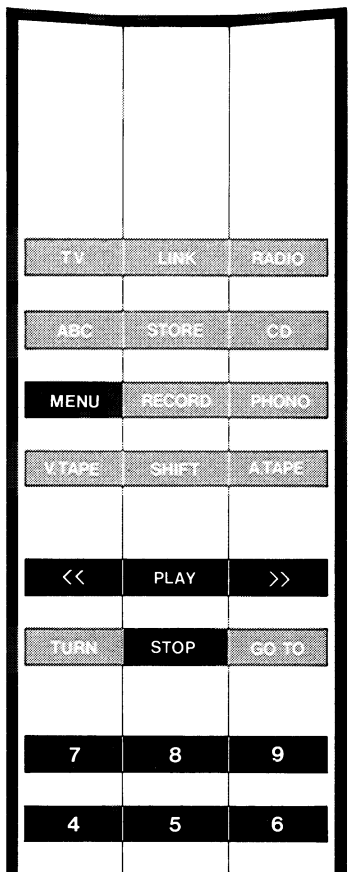
On-screen operation principles

The on-screen menus give access to a large number of functions making operation of the Video System very easy and comfortable.

The functions are listed like the items in a menu from which you can choose what you want. The item or function which you are about to choose is high-lighted in red color (= cursor position). As you run through the items you will find that they change color from blue to red.

Once you have chosen a function, a new page appears giving you further information about that particular function.

You will find that some of the pages prompt you to fill in figures or choose from certain options to obtain the desired results.



Using the Beolink 1000 for on-screen operation

The Beolink 1000 terminal enables you to operate all the on-screen menus. The only buttons you have to use are those dedicated specially for on-screen operation.

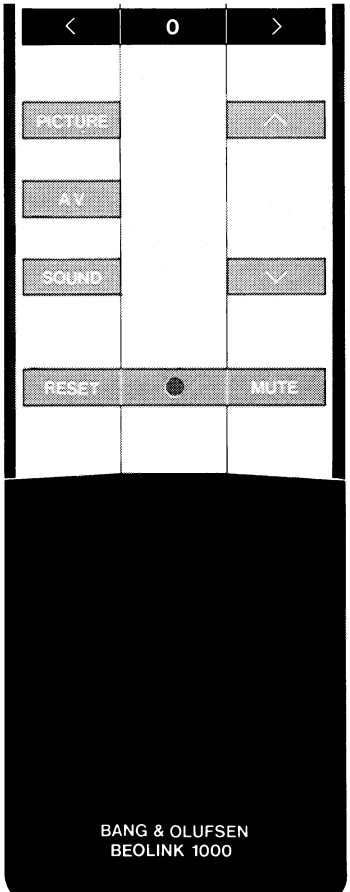
Press [TV] *or* [V.TAPE] *as appropriate to switch on.*

Pressing [V.TAPE] switches on the VCR and TV-set simultaneously. The tape, if already loaded in the VCR, starts playing within a few seconds, unless you press [MENU] or e.g. [STOP] immediately after pressing [V.TAPE].

To call the main menu (TV or VCR)	Press [MENU]

To move the cursor	Press [<<] or [>>]
To select a specific item (function) in a menu	Press [PLAY]
To review the options of a particular item	Press [<] or [>]
To supply numbers	Press any of the numbered keys from [0] to [9] or press [<] [>]
To remove the text from the screen	Press [STOP]
To accept a page	Press [PLAY]

This information is also available in the on-screen operating guide (see the next paragraph).



On-screen operating guide

You can call an operating guide onto the screen by pressing MENU twice (once only if you are already in the main menu). The guide explains briefly how to operate the on-screen displays using the buttons on the Beolink 1000 remote terminal.

The operating guide appears automatically if you are using the buttons in an inappropriate way to carry out a specific function.

To return to on-screen operation, press PLAY or MENU. Pressing MENU leads you to the main menu.

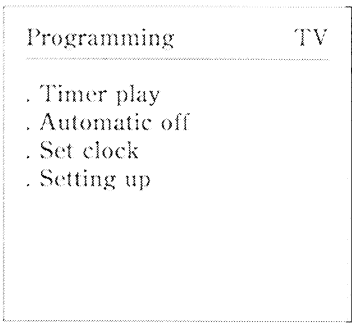
Removing the TV picture temporarily

The main menu and subsequent pages or submenus are superimposed on the TV picture. If you want the text to be displayed on a black background, you can remove the picture by pressing PICTURE, MUTE. Press PICTURE, MUTE again to recall the picture.

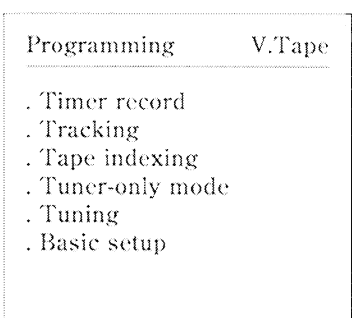
Accessing the menus

The first page appearing when you press MENU is the main menu:

TV MENU



V.TAPE MENU



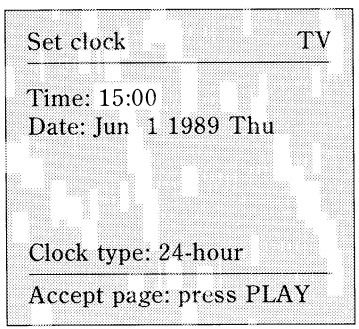
Access the function of your choice by pressing << or >> until it appears in red color, then press PLAY to select that function. Continue operating according to the previous instructions, selecting items or filling in as appropriate.

Please note that details about the use of specific functions listed in the menus are given in the paragraphs dealing with these functions (see the Table of Contents).

PROGRAMMING THE VIDEO SYSTEM

Set clock

To set the clock you must access the main TV menu (press TV, then MENU) and select the item 'Set clock'. This page now appears:



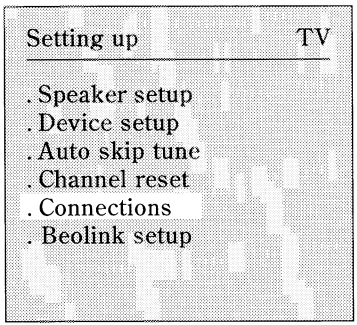
Enter the appropriate data. You will find that the name of the day is set automatically.

If you want to use the 12-hour clock, select 'am/pm' instead of '24-hour'. Before accepting the page, make sure that the time is set correctly, e.g. '12.00pm' for twelve noon, '1:00pm' for one in the afternoon, '12:00am' for twelve midnight, and '1:00am' for one in the night.

Setting up

Connections

After hooking up the MX 5000 and the VX 5000 together with other devices, if any, you must program your Video System accordingly. To do so, call the main TV menu (press TV, then MENU) and select the item 'Setting up'. This submenu now appears:



Select the item 'Connections'. The pages now appearing one after the other prompt you to enter data related to the components incorporated in your system.

- **Setup code (1-12): Key in the number indicated on the setup diagram which matches the one you have chosen.**

Suppose you indicate 5 here (one cable-TV connection; MX 5000 and VX 5000 together with one decoder), the following data will have to be entered:

○ **V.Tape input B:** CATV std
CATV IRC
CATV HRC

std = standard
IRC = Intermediate Related Carrier
HRC = Harmonic Related Carrier

Indicate your type of cable-TV system. CATV std is good in most cases. If in doubt, you must consult your cable-TV company for details.

○ **V.Tape input C: Decoder**
Decoder output channel (2/3/4)
Select the output channel of the decoder connected to VX 5000 input C.

○ **TV input AV2:** No source
V.Tape
CDV
Select the type of device connected to the MX 5000 input AV2. Indicate 'No source' if the AV2 input is vacant. Indicate 'V.Tape' if a VCR (VX 5000 or other) is connected to the AV2 input (use SHIFT V.TAPE command to activate input). Indicate 'CDV' if a video compact disc player is connected to the AV2 input (use SHIFT CD command to activate input).

○ **Store this new connection data:** No
Yes
Select 'Yes' or 'No' as appropriate. This simple question is meant to protect already stored connection data against being accidentally cancelled.

The data you are required to fill in differs from one setup to the other. Other data you may be required to fill in for other setups is as follows:

○ **TV input A:** No source
Device*
Antenna
CATV std
CATV IRC
CATV HRC

○ **TV input B:** Antenna
CATV std
CATV IRC
CATV HRC

○ **TV input AV1:** V.Tape
No source

○ **TV input C:** Decoder
Decoder output channel (2/3/4)

* You will only be asked to fill in this data if you have selected setup code 1 (MX 5000 alone). In this setup you will find that you can connect various equipment to the TV-set, e.g. a decoder as shown in setup diagram 1b. Such equipment is referred to as 'Devices' and must be programmed into the system according to the instructions in the paragraph "Device setup" on page 28.

Beolink setup

The Beolink setup procedure is required only if your Video System 5000 is part of a Beolink system, that is connected to a compatible Bang & Olufsen audio system (cf. the paragraph "Beolink connections" on page 19).

Access the 'Setting up' submenu and select the item 'Beolink setup'. Continue to fill in as appropriate:

- ○ TV IR option (1/2/4): Select option 1 or 2 as appropriate for your Beolink setup. Refer back to the paragraph "Beolink connections" on page 19 for details. Option 4 is for a special Master Control Link setup. Consult the Master Control Link 2 manual or your Bang & Olufsen dealer for details.
- ○ TV Link option (5/6): Select option 5. Option 6 is for a special Master Control Link setup. Consult the Master Control Link 2 manual or your Bang & Olufsen dealer for details.

Speaker setup

The speaker setup procedure is for use only in a system with external Power Link speakers connected to the TV-set (cf. the paragraph "Connecting extra loudspeakers" on page 20).

The TV-set can be set up to reproduce sound either through the internal speakers, or through the external Power Link speakers, or through both pairs of speakers simultaneously.

To do so, access the 'Setting up' menu and select the item 'Speaker setup'. Indicate your choice of speaker setup on the page now appearing, that is 'Int' (internal), 'Ext' (external), or 'Int and ext' (for both pairs of speakers).

Switching between internal and external speakers can also be done directly, that is without entering the TV menus. To do so, press [SOUND], then [MUTE] repeatedly: once for total mute, twice for internal speakers only, three times for external speakers only, and four times for both internal and external speakers; press [MUTE] a fifth time to return to internal speakers.

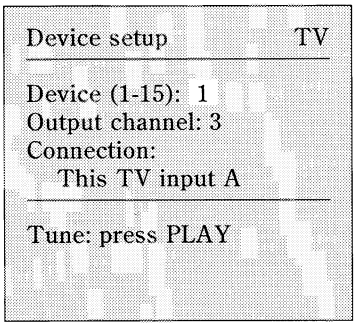
Device setup

The device setup facility is for use in a setup which includes RF equipment (device) not mentioned in any of the 12 setup diagrams, e.g. a home computer.

It may also be used if the TV-set is set up as a local TV-set with LINK connection to a central Video System (cf. the paragraph "Connecting a second MX 5000 TV-set in another room" on page 21). It enables you to distribute picture and sound from all the units, including decoders, in the central Video System to the local TV-set.

All you have to do is to program such a device into the TV-set and assign a number to it by which it can later be identified.

To program a device access the submenu 'Setting up' and select the item 'Device setup'. This page now appears:



Enter the data appropriate for the device concerned.

○ **Device:** Select the number to which you want to assign the device.
Please note:
- If you are using setup code 5, 6, 8, 9, 11 or 12, you will find that device nos. 1 and 2 are automatically assigned to the one or two decoders already programmed into the system.
- Device no. 13 is reserved for any VCR connected to the central TV-set (AV1 socket) in a system with two MX 5000 TV-sets.
- Device no. 14 is reserved for any second VCR connected to the central TV-set (AV2 socket) in a system with two MX 5000 TV-sets.
- Device no. 15 is reserved for any video compact disc player (CDV) connected to the central TV-set (AV2 socket) in a system with two MX 5000 TV-sets.

○ **Output channel:** Key in the channel on which the device transmits its signals.

○ **Connection:** Select the input(s) on the TV-set and/or the VCR to which the device concerned is connected, e.g.:
- This TV input A/B/C
- VCR input B/C
  to this TV input A/B*
- Other TV input B/C
  to this TV input A/B*

* Applicable only in a system with two interconnected TV-sets.

- **'This TV input A/B/C'** refers to the input on the MX 5000 TV-set. Select A, B or C as appropriate for the input to which the device is connected.
- **'VCR input B/C'** refers to the input on the VX 5000. Select B or C as appropriate for the input to which the device is connected.
- **'to this TV input A/B'** refers to the input on the MX 5000 TV-set you are currently programming. Select A or B as appropriate for the input through which the signal is fed.
- **'Other TV input B/C'** refers to the input on the central MX 5000 TV-set. Select B or C as appropriate for the input to which the device is connected.
- **'to this TV input A/B'** refers to the input on the MX 5000 TV-set you are currently programming. Select A or B as appropriate for the input through which the signal is fed.

Press PLAY to tune to the channel on which the device transmits its signals. When you see the correct picture on the screen, that is the picture transmitted by the device in question, press PLAY again to accomplish the programming procedure for that device.

To select any one of the devices programmed into the TV-set, press ABC until 'Device' appears in the upper left-hand corner of the screen, then key in the appropriate device number.

Channel programming

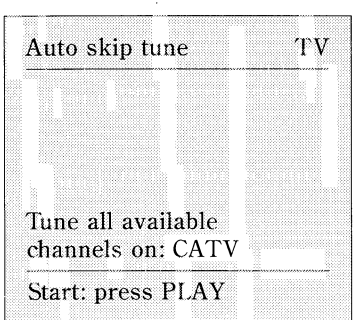
When the TV-set and the VCR leave the factory they are already programmed with all the channels either off air (2-69) or cable (2-125). This means that once you have set up the system you can access any of these channels immediately just by pressing the appropriate number on the Beolink 1000 terminal.

However, you can also program the channels available to you in any order you like, e.g. skip empty channels or reposition channels, that is give them a number of your own choice. See the following paragraphs in this section for further instructions.

Programming only active channels into the Video System (Auto skip tune)

This function enables you to automatically skip all vacant channels so that you can quickly scan only those channels which are available in your area. It is usually a «one-time» procedure, but you will need to repeat it if you move to a location that has different channels or if new channels are introduced. The auto skip tuning process automatically resets all channels previously programmed into the system.

To program active channels call the submenu 'Setting up' and select the item 'Auto skip tune'. This page now appears:



Press ▷ to select the option of your choice (CATV/Antenna or CATV A/B if you have two cable-TV inputs), then press PLAY to start the auto skip tuning process. If you have only one input in your system (antenna or cable-TV), this option will be selected automatically.

Repeat this procedure for the other type of input, if any, available in your video system.

As the auto skip tuning process is progressing, the channel numbers are counting upward, and you will see very short glimpses of the channels picked up.

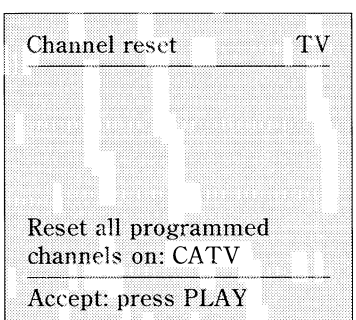
To see the result of the auto skip

tuning process, press [TV] then [>] or [<] repeatedly to scan the channels programmed into the system. Press [ABC] to switch from one input to the other, then press [>] or [<] to scan the channels on this input.

Resetting channels

This function resets all the channels previously programmed into the video system, leaving the total of channels on their original numbers (factory setup).

To reset channels call the submenu 'Setting up' and select the item 'Channel reset'. This page now appears:



Press [>] to select the option of your choice (Antenna/CATV or CATV A/B if you have two cable-TV inputs), then press [PLAY]. If you have only one input in your system (antenna or cable-TV), this option will be selected automatically.

The next page appearing asks you to confirm or cancel your previous instruction. Press [>] to select 'Yes' or 'No'. Only if you indicate 'Yes' and then press [PLAY], will the channels be reset.

The 'Channel reset' procedure must be carried out separately for each type of input available in your video system.

Presetting channels on specific program numbers

The system enables you to preset channels on program numbers of your own choice (1-125). You may find this function useful for instance if the cable-TV company has shifted the channel number of off-air broadcasts.

To preset a channel on a specific program number, do as follows:

1. Select the channel of your choice.
2. Press [STORE].
3. Key in the program number of your choice (1-125).
4. Press [STORE] again.

Press [ABC] to switch inputs, then repeat the procedure for the channels on this input.

To select such preset channels, simply key in the appropriate program number.

If you want a specific channel number, however, press [GO TO], then the channel number you want. Pressing [GO TO] always gives you access to the original channel numbers.

Clearing program numbers

You can clear any program number from the memory. To do so, select the program number of your choice, then press [STORE] [0] [STORE].

Once you have cleared a program number, it can no longer be accessed using [<] or [>] or the numbered keys. To access the channel number originally preset on the program number press [GO TO] and the appropriate channel number.

Manual fine tuning

The MX 5000 automatically fine tunes to the best possible picture quality. It is, however, possible to fine tune (or detune) a channel manually, e.g. if it is blurred by signals from a neighboring channel. To fine tune, press [GO TO] then [<<] or [>>] until the picture is clear and stable. A fine tuning instruction must be stored along with the program number on which it is made, that is by pressing [STORE] twice. It is indicated by FT and a plus or minus figure, e.g. 3 or -3, inserted at the top of the screen.

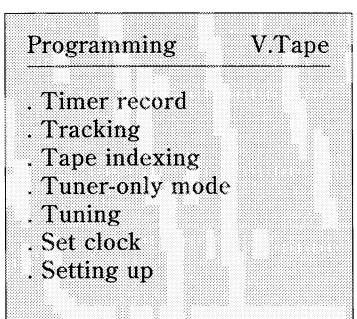
The VX 5000 also features a manual fine tuning control. This function must be accessed via the main VCR menu. Select the 'Tuning' menu, then proceed to the item 'Fine tuning'. The information now appearing on the screen instructs you to fine tune using [<] or [>].

PROGRAMMING THE VX 5000

The instructions in this section apply only if your VX 5000 is NOT used in combination with the MX 5000 TV-set.

Remote control:
A separate IR sensor (the Bang & Olufsen VX Sensor) is required if you want to make use of all the remote controlled functions in the VX 5000. The VX Sensor must be connected to the socket marked REMOTE SENSOR on the rear panel. The VX Sensor and the Beolink 1000 remote terminal are available as optional accessories from your Bang & Olufsen dealer.

Programming:
The VX 5000 must be programmed with certain information to make it ready for use. This information is of the same nature as that required for the Video System 5000 and described in this manual. To program the VX 5000, enter its main menu by pressing [V.TAPE], [MENU]. This page now appears on the TV screen:



The items relevant to programming are the following:
Tuning
Set clock
Setting up

Carry out the programming procedure selecting first the 'Setting up' menu, then the 'Tuning' menu and finally 'Set clock'. Follow the on-screen instructions and enter the programming information applying to your setup as prescribed by the on-screen displays.

For a better understanding of this programming procedure, we recommend that you refer to the section "Programming the Video System" on page 26.

PICTURE AND SOUND ADJUSTMENTS

The TV-set always switches on at specific preset picture and sound levels. These levels are adjustable, and new preset levels may be stored, if required.

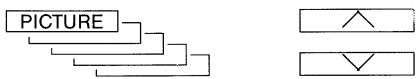
Picture adjustments

Brightness:	Intensity of light.
Color:	Intensity of colors.
Contrast:	Difference between black and white.
Tint:	Skin tone.
Sharpness:	Picture sharpness.

These picture levels can be adjusted to any level within a range from 0 to 63. The preset level from the factory is 32.

To adjust:

1. Press PICTURE once or several times until the appropriate cue is visible in the upper left-hand corner of the screen.
2. While the cue is still visible, press ∧ or ∨ until you reach the desired level.



Please note that if the MS 5000 stand or the MB 5000 base is connected to the TV-set, the display < Stand > will appear in the upper right-hand corner of the screen when you press PICTURE for the first time. See the paragraph "Changing the viewing direction" for further instructions.

Sound adjustments

Volume: Sound volume level.

The volume level can be adjusted to any level within a range from 0 to 63. The preset level from the factory is 4.

Balance: Distribution of sound in the two speakers.
Treble: High tones.
Bass: Low tones.

These sound levels can be adjusted to any level within a range from -6 to 6. The preset level from the factory is 0 (neutral).

To adjust:

1. Press SOUND once or several times until the appropriate cue is visible in the upper left-hand corner of the screen.
2. While the cue is still visible, press ∧ or ∨ until you reach the desired level.

Store function

This function enables you to store new levels in the TV-set so that it switches on at e.g. a lower volume level or a lower brightness level than the one stored at the factory. Adjust the picture and sound levels according to the instructions in the preceding paragraph.

To store new *picture levels,* press PICTURE, STORE. The cue 'Picture stored' appears on the screen, confirming your command.

To store new *sound levels,* press SOUND, STORE. The cue 'Sound stored' appears on the screen, confirming your command.

Storing individual tint levels
The tint level can be stored differently from channel to channel. To do so, select the appropriate program number, adjust the tint level to your liking, then press STORE twice. The current tint level will now be stored along with the program number.

Reset function

This function resets the picture or sound levels to their preset levels. This means that if you make temporary adjustments to the picture or the sound you can easily return to the stored levels.

To reset *picture levels,* press PICTURE, RESET.

When resetting picture levels tint returns to the level that it was stored for on that particular program number.

To reset *sound levels,* press SOUND, RESET.

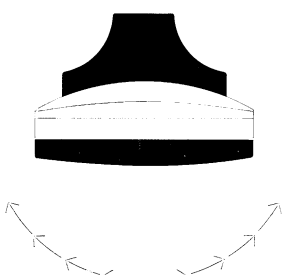
To reset *picture and sound levels* simultaneously, press RESET.

Changing the viewing direction

If placed on the MS 5000 stand or the MB 5000 base the TV-set can be turned by up to 35° to the left or to the right to suit your viewing position. To do so, press PICTURE once. While the display < Stand > is visible, press and hold down < or > to turn the TV-set in the direction required.

You can store your favorite viewing position in the memory of the TV-set. This means that the TV-set will automatically turn to that position when you switch it on. To do so, turn the TV-set to the position required, then press PICTURE, STORE. *NOTE!* When you store the viewing position you simultaneously store all other current picture levels.

When the TV-set is switched to stand-by mode, it automatically returns to its neutral position.



PICTURE

WHICH CASSETTES TO USE AND HOW TO USE THEM

Which cassettes to use

The following VHS and S-VHS cassettes may be used with the VX 5000:

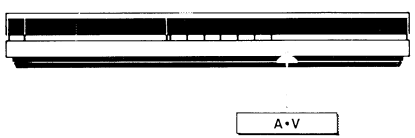
VHS	**S-VHS**
T20	ST30
T30	ST60
T60	ST120
T90	
T120	
T160	

The VX 5000 registers automatically whether the cassette is a standard VHS video cassette or a Super VHS (S-VHS) video cassette.

All recordings are made in the S-VHS format provided you are using a S-VHS cassette. If you are using a standard VHS cassette, the VX 5000 adjusts automatically to the standard VHS format.

Recordings made in the S-VHS format can be played only on VCRs featuring the S-VHS function.

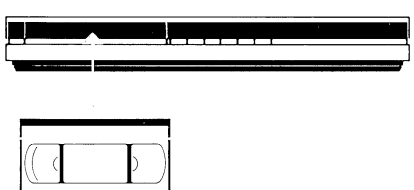
If you wish to record on a S-VHS cassette in standard VHS mode, press the AV button on the VX 5000 in recording pause mode. This will make the S indication on the display disappear as an indication that the S-VHS function is cut out.



How to load and unload cassettes

Loading:
Hold the VHS cassette with the arrow uppermost and pointing toward the compartment opening. Push the VHS cassette through the door until you feel the mechanism drawing it all the way into the compartment.

Unloading:
Press the EJECT button on the VX 5000. The cassette is ejected automatically. The cassette cannot be ejected if the VCR is in recording mode.



Setting tape speed

Recordings can be made at two different tape speeds:

SP = normal speed (SP), that is 2 hours on an ST/T120 cassette. This speed should be selected for optimum picture quality.
EP = one third of normal speed, that is 6 hours on an ST/T120 cassette.

Press the [SPEED] button on the VX 5000 to switch speeds.

In playback the VX 5000 adjusts automatically to the speed at which the cassette was recorded, including LP (half speed) for cassettes recorded on another VCR with the LP speed function.

SP

EP

LP

Tape calibration

The VX 5000 calibrates the tape, that is registers its exact position, both during playback and recording. This information is read out on the VX 5000 itself and on the status displays inserted on the screen. You can instruct the VX 5000 to use one of the three following ways to calibrate the tape:

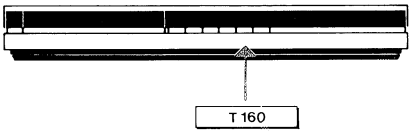
- Counter, allowing you to register the counter position of any passage on the tape for later retrieval. The counter is always reset to 0000 when a cassette is loaded, or when it is rewound to the beginning.
- Track, allowing you to see which track number is playing. This requires, however, that the tape is played back from the start.
- Time left, allowing you to see how much playing time (hours and minutes) is left on the tape.

Please refer to the paragraph "Basic VX 5000 setup" on page 48 for details about selecting the tape calibration method.

If you want track numbers to be read out, you must make sure that your tape was recorded with the 'Track marker' in the 'Basic setup' menu set to 'On'. This means that each separate track (recording) on the tape will be encoded with a special signal by which they can later be identified and counted.

If you are using the 'Time left' readout, make sure to press the T160 button on the VX 5000 whenever a T160 cassette is loaded. This ensures that the VCR will always make a correct calculation of the time left on this type of tape.

The VCR registers the time left on the tape during playback or recording, but not during any fast wind functions.

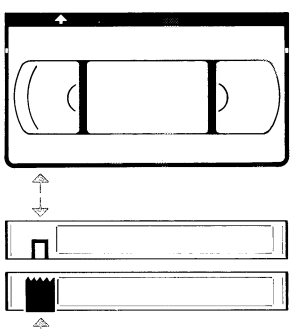


T160

Erase protection

To prevent accidentally erasing a recording you want to keep, remove the safety tab from the back of the cassette. Recording is impossible when this tab is removed. If you press the RECORD button while such a cassette is loaded, it will automatically be ejected.

To record again on a cassette that has the tab removed, simply cover the hole with adhesive tape.



TIMER PROGRAMMING

The VX 5000 VCR can be programmed to start and stop recording automatically at any time you specify. It can be programmed to record both TV and radio programs or both simultaneously (Beolink system only).

The MX 5000 TV-set can be programmed to switch on automatically at any time you specify. It can be programmed to play any source available in your system, including audio sources.

The TV-set and the VCR can each memorize eight sets of instructions (timer blocks) at a time for events taking place once only, or at the same time daily or weekly.

Timer programming is done by remote control via the on-screen menus. Please refer back to the section "How to use the on-screen menus" on page 22 for details about menu operation.

Timer recording

1. Enter the main VCR menu by pressing V.TAPE, then MENU.
2. Select the item 'Timer record'. The timer index now appears, listing the eight timer blocks. The first vacant block appears in red color (= cursor position).
3. Press PLAY to access the timer block.
4. Continue to enter the data required:
   - Source or input: Press > to review the sources or combinations of sources (simulcast programs) or inputs available in your system.
     Don't forget to key in program numbers, if required.
   - Start time: Key in the time you want the recording to start.
   - Stop time: Key in the time you want the recording to stop.
   - How often: Press > to select 'Once only', 'Daily' or 'Weekly'.
     If once only, enter date.
     If weekly, press >> to move from one day to the other and > to reveal each day you require.
   - Store or clear: Press > to select 'Store' or 'Clear'.
5. Press PLAY to accept the page. The timer index returns. You will find that a new timer block has been filled in, or a timer block has been cleared, depending on your previous store or clear instruction.

Press >> if you want to step to the next empty timer block. Then press PLAY to access this block. Alternatively, press STOP to leave the menu. You can of course enter any timer block in order to change, review or clear the information already filled into it.

If you are playing a tape when a timer recording is about to be executed, the tape will stop playing and this text will appear on the TV screen:

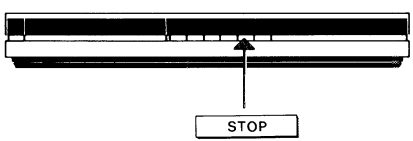
```
Timer record   19.00
Press PLAY when ready
or press STOP to cancel
```

The text appears approximately 8 minutes before the recording is due to start, leaving you enough time to change tape cassettes, if required, and to find the right spot on the tape. *Do not* press PLAY until the tape is ready for recording.

Alternatively, press STOP if you don't want the timer recording to start.

Stopping a timer recording in progress

If a recording has already started and you want to stop it, press the STOP button on the VX 5000 twice. The TIMER cue on the VX 5000 will blink rapidly, reminding you that you are interfering with a timer recording programmed to stop later.



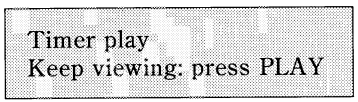
TIMER

Timer play

1. Enter the main TV menu by pressing [TV], then [MENU].
2. Select the item 'Timer play'. The timer index now appears, listing the eight timer blocks. The first vacant block appears in red color (= cursor position).
3. Press [PLAY] to access the timer block.
4. Continue to enter the data required:
   - Source or input: Press [>] to review the sources or combinations of sources (simulcast programs) or inputs available in your system. Don't forget to key in program numbers, if required.
   - Start time: Key in the time you want the TV-set to switch on.
   - How often: Press [>] to select 'Once only', 'Daily' or 'Weekly'. If once only, enter date. If weekly, press [>>] to move from one day to the other and [>] to reveal each day you require.
   - Store or clear: Press [>] to select 'Store' or 'Clear'.
5. Press [PLAY] to accept the page. The timer index returns. You will find that a new timer block has been filled in, or a timer block has been cleared, depending on your previous store or clear instruction.

Press [>>] if you want to step to the next empty timer block. Then press [PLAY] to access this block. Alternatively, press [STOP] to leave the menu. You can of course enter any timer block in order to change, review or clear the information already filled into it.

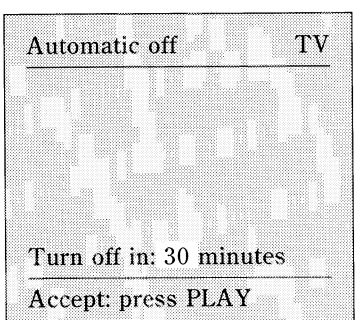
When switching on at the time specified the TV-set displays this information at the top of the screen:



If you do not press PLAY, the TV-set will switch off again within 5 minutes. This is to make sure that the TV-set does not stay turned on indefinitely if nobody is around to confirm the programmed play instruction.

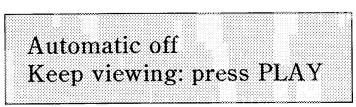
Automatic off

Enter the main TV menu and select the item 'Automatic off'. This page appears:



Key in the minutes you require (from 2 up to 240 minutes).

Two minutes before the TV-set is due to switch off, this information appears at the top of the screen:



If you do not press PLAY, the TV-set will switch off as originally instructed.

SPECIAL PICTURE EFFECTS

The special picture effects described in this section are not available when the MX 5000 TV-set is used alone without the VX 5000 VCR.

Picture-in-picture

This function enables you to insert a small picture on the screen showing a TV program or a video tape. This means that you can monitor the video tape or another TV program without leaving the program you are already watching.

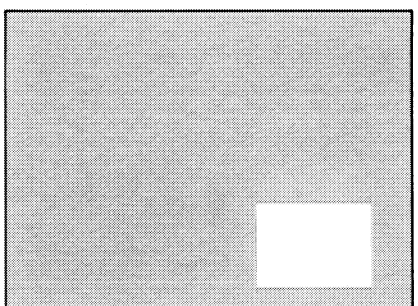
To obtain the picture-in-picture function, press PICTURE, then the source you want, that is V.TAPE or TV. You can now operate the source in the small picture. To operate the source in the large picture instead, first press the appropriate source button, that is V.TAPE or TV.

Press 0 to swap the two pictures. The sound always follows the large picture.

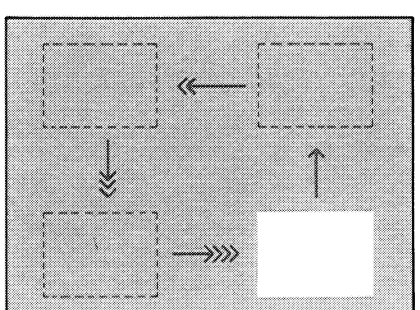
You can move the small picture from corner to corner by pressing PICTURE, then TURN repeatedly.

Press TV or V.TAPE twice in quick succession to cancel the picture-in-picture function.

PICTURE → TV / V.TAPE



PICTURE → TURN



Multi-picture function

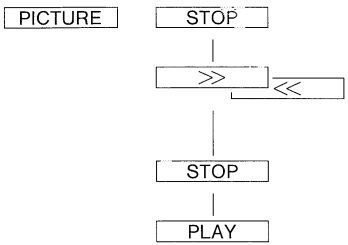
This function enables you to split up a sequence on the video tape or a sequence of a TV program from the VCR tuner into 12 small pictures appearing simultaneously on the screen. The pictures change slowly one by one in a continuous series of split screens.

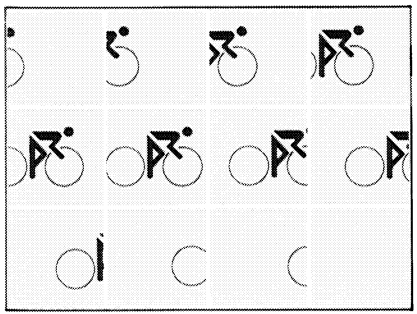
While playing back the video tape or watching a TV program, press PICTURE, STOP to obtain the multi-picture function. *Press STOP if you want to see a still picture of all the pictures simultaneously; press PLAY again to release the pictures.

You can make the pictures change more slowly or more quickly by pressing << or >>.

If << is held long enough, only one picture will continue moving. *If you want to freeze this picture, press STOP; press PLAY to release the next picture; press STOP and PLAY alternately to freeze and release the pictures one by one.

Press V.TAPE or TV to cancel the multi-picture function.





*These functions are applicable only in video playback, not when watching a TV program.

Multi-program function

The VCR can display up to 12 different TV programs simultaneously on the screen. You can arrange the 12 TV programs on the screen in any order you like. To do so, enter the main VCR menu (while the tape is stopped) and select the item 'Tuning'. Proceed to select the item 'Multi-program' from the 'Tuning' menu. This page now appears:

Multi-program		V.Tape	
Antenna	2	Antenna	8
Antenna	3	Antenna	9
Antenna	4	Antenna	10
Antenna	5	Antenna	11
Antenna	6	Antenna	12
Antenna	7	Antenna	13

Accept page: press PLAY

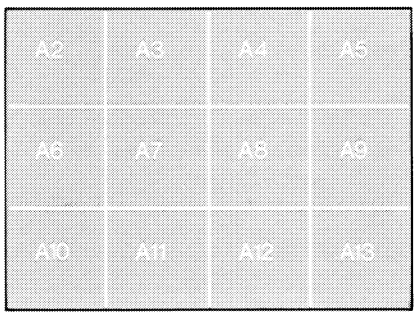
Please note that the program numbers shown in this example are those preset at the factory.

To select the program numbers you wish to display, use [>>] to highlight the items one by one in red color and [>] to review the input options and the program numbers available. When you have finished arranging the page, press [PLAY].

To display the 12 TV programs on the screen, press [PICTURE], [GOTO] (while the tape is stopped). The TV programs appear on the screen one by one, beginning in the upper left-hand corner. Each program is identified in abbreviated form by a letter plus a number, e.g.:

A1 = Cable-TV A, program number 1
B2 = Cable-TV B, program number 2
A5 = Antenna, program number 5
C12 = Cable-TV, program number 12
Dev.1 = Decoder 1

To cancel the multi-program function press either [TV] or [V.TAPE] as appropriate.

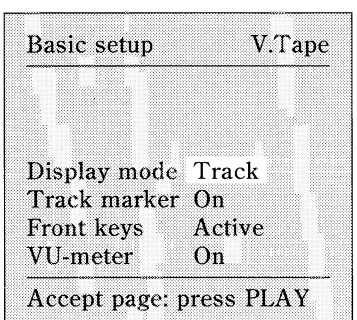


[PICTURE]
|
[GO TO]

MISCELLANEOUS VCR FUNCTIONS

Basic VX 5000 setup

The VX 5000 must be pre-programmed with a number of basic setup data which are related to certain functions in the VCR. To do so, enter the main VCR menu (press V.TAPE, then MENU) and select the item 'Basic setup'. This page now appears:



Enter the data of your choice:

- ○ Display mode indicates the type of tape calibration you want the VCR to use: 'Counter' (tape counter position), 'Track' (track number), or 'Time left' (time left on tape). See page 38 for further details about tape calibration.
- ○ Track marker must be 'On' during recording if you want to use any function in the VX 5000 requiring it to search for tracks on the tape.
- ○ Front keys can be set to 'Active' (the keys on the VCR are operative) or 'Inactive' (only remote controlled operation is possible). Disconnecting the VX 5000 from the AC resets the front keys to 'Active'.
- ○ VU-meter must be 'On' if you want to be able to see the signal level readings during recording and playback.

Tracking

Streaks in the picture, especially appearing at the top and bottom of the screen, or noise in the sound may be due to imprecise tracking of the video tape. This is seen most often when playing back tapes recorded on another VCR or when playing back prerecorded tapes.

To adjust the tracking enter the main VCR menu and select the 'Tracking' function. This information now appears on the screen:

Press [<] or [>] repeatedly until you obtain the best possible picture and sound.

The display will be removed automatically from the screen if you do not press [<] or [>] within 10 seconds.

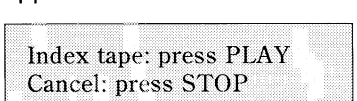
Every time you load a cassette the tracking adjustment function is reset to its neutral position.

Tape indexing

The indexing function enables you to search quickly through the tracks (recordings) made on the tape and obtain an index of all the tracks.

Using this function requires that the tape was recorded with the 'Track marker' in the 'Basic setup' menu set to 'On', or on another VCR with the track marking feature (VISS).

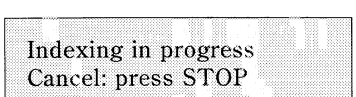
To index a tape you must enter the main VCR menu and select the item 'Tape indexing'. This page now appears:



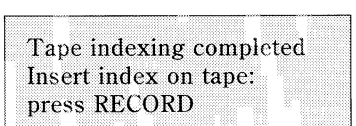
When you press [PLAY] the VCR first rewinds the tape to the beginning of the tape, then starts winding forward, inserting a small still picture on the screen every time a track mark is registered.

You can stop the indexing function any time simply by pressing [STOP].

While the tape is being indexed, you will see this text on the screen:



Once the tape has been wound to the end, it automatically rewinds back to the beginning. A complete index of all the tracks on the tape can be seen on the screen (max. 12), and this text will appear simultaneously:



If you press [RECORD] the VCR records the index on the first 5 seconds of the tape, then stops automatically.

Tuner-only mode

The VX 5000 can be switched to tuner-only mode so that you can use the VCR tuner to pick up TV channels. If switched to tuner-only mode, the VCR remains on for 24 hours before switching automatically to stand-by mode.

To switch to tuner-only mode, call the main VCR menu and high-light the item 'Tuner-only mode'. The moment you press [PLAY] to select this function, the VX 5000 switches to tuner-only mode, as indicated by the status line appearing on the screen.

Selecting sound tracks during playback

You can switch between the different sound tracks recorded on the tape: Hi-Fi, linear (LINEAR; including Second Audio) or select a combination of Hi-Fi and linear (MIX).

Press [TURN] on the Beolink 1000 or [SOUND] on the VX 5000 to switch between the sound tracks.

Recordings are always made with both a Hi-Fi and a linear sound track. During playback, however, the VX 5000 automatically reproduces the Hi-Fi sound track, unless otherwise instructed.

If e.g. you are playing back a 'worn' Hi-Fi tape, the Hi-Fi sound may be adversely affected and you should switch to the linear sound track. You must also switch to the linear sound track if you want to hear the sound you have dubbed onto a tape.

If you are playing back a recording with a Second Audio sound track, you must switch to the linear sound track.

Select MIX if you want to hear both the Hi-Fi and the linear sound tracks.

Using the HQ function

The HQ function is designed to improve the picture quality of your video recordings and works automatically during recording and playback. It can be cut out manually during playback, however, by pressing the [HQ OFF] button on the VX 5000.

We recommend that you cut out the HQ function when copying a tape recorded on the VX 5000 onto another VCR also equipped with the HQ function. This is to prevent any bad side effects of the doubling of the HQ function.

The HQ function is automatically disabled during playback and recording in S-VHS mode.

Audio-only recording

An audio-only recording can be made from an audio source in your Beolink system, e.g. the radio, meaning that only sound will be recorded on the video tape.

1. Press [AV], then e.g. [RADIO] to switch on the radio. The TV-set is now in audio mode.
2. Select the preset radio station of your choice.
3. Press [RECORD] once to switch to recording pause mode.
   The VCR automatically switches to audio-only mode, as indicated by the AUDIO cue. It automatically selects the LINE input, as indicated by the LINE cue.
4. Press [RECORD] to start recording.

When playing back the audio tape, the VX 5000 must be switched to audio-only mode by pressing the the button [AV] on the secondary operating panel.

Simulcast recording

A simulcast recording is a recording of a program broadcast by a TV station and an FM radio station simultaneously. This means that the pictures will be recorded along with the FM stereo sound on the video tape.

1. Press [TV] to switch on the TV-set.
2. Select the channel of your choice.
3. Press [AV], [RADIO] to switch on the radio.
4. Select the preset radio station of your choice.
5. Press [RECORD] once to switch to recording pause mode.
   The VCR automatically selects the LINE input as sound input, as indicated by the LINE cue.
6. Press [RECORD] to start recording.

Recording from a video camera

1. Connect the video camera to the phono sockets marked AV2 on the MX 5000 TV-set.
2. Press [SHIFT], [V.TAPE] to switch on the TV-set.
3. Press [RECORD] on the VX 5000 to switch to recording pause mode.
4. Press [SOURCE] on the VX 5000 to switch to AUX mode. AUX mode is indicated by the AUX cue.
5. Press [RECORD] on the VX 5000 a second time to start recording.

Please note!
If your camera is equipped with a camera pause plug, connect it to the CAMERA PAUSE jack on the rear panel of the VX 5000. This enables you to start and stop the video tape in the VX 5000 using the buttons on the video camera.

Audio and video dubbing

Audio dubbing means that you record new sound onto a video tape, e.g. add your own voice or music to a video camera recording. The new sound dubbed onto the tape replaces the sound originally recorded on the linear sound track, whereas the Hi-Fi sound track, if any, remains unaffected. This means that you can switch between, or mix, the two sound tracks (linear and Hi-Fi) when playing back the tape.

Video dubbing means that you record new picture and sound onto a video tape, e.g. insert a video camera recording onto the video tape. The new pictures recorded

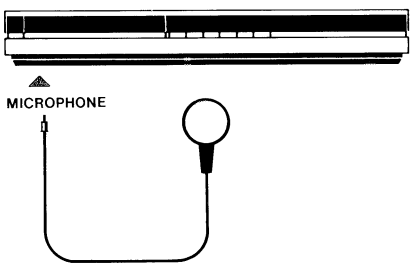
onto the tape erase the pictures that were originally recorded on the tape, and the new sound erases the original Hi-Fi sound, if any, whereas the original linear sound track remains.

The buttons for audio and video dubbing are on the VX 5000 secondary operating panel:

[DUB], [INSERT], [RECORD], [STOP].

Audio dubbing, using a microphone

1. Plug a microphone into the MICROPHONE socket on the VX 5000.
2. Load the tape you want to dub in the VX 5000.
3. Show a still picture on the screen of the place where you want to start dubbing.
4. Press [DUB].
5. Press [RECORD] twice.
6. Start speaking.
7. Press [STOP] twice to stop dubbing.



Audio dubbing, music

1. Load the tape you want to dub in the VX 5000.
2. Show a still picture on the screen of the place where you want to start dubbing.
3. Press [DUB], then [RECORD].
4. Play the audio source you want to dub onto the tape through the TV-set.
5. Press [RECORD] to start dubbing.
6. Press [STOP] twice to stop dubbing.

Video dubbing from a video camera

1. Load the tape on which you want to insert new pictures.
2. Show a still picture on the screen of the place where you want to start inserting new pictures.
3. Press [INSERT], then [RECORD].
4. Switch the VX 5000 to AUX mode (cf. the paragraph "Recording from a video camera").
5. Start recording from the video camera.
6. Press [RECORD] to start dubbing.
7. Press [STOP] twice to stop dubbing.

Adjusting the recording level

When recording a TV program from the VCR tuner you need not adjust the recording level. This is done automatically.

However, if you are recording in AUX or LINE mode, that is from a video camera or from an audio source, the recording level must be adjusted manually, using the REC LEVEL sliders on the right-hand side of the secondary operating panel. We recommend you aim to keep the level around the 0 mark in the VU-meter with only occasional blinks in the red area beyond 0.

The normal setting of the recording level sliders is at 4 (center click position).

Reading the recording level of course presupposes that the VU-meter in the 'Basic setup' menu has been set to 'On'.

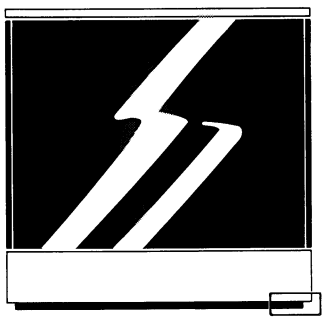
LIST OF BUTTONS, DISPLAYS AND SOCKETS
MX 5000

Front

Headphones socket
If you connect headphones, the internal speakers are cut out.

Program step button
Press to switch on and step forward through program numbers.

Stand-by switch
Press to switch the TV-set on or, if already on, to stand-by.



Rear panel

R EXT. SPEAKERS L
Sockets for connecting auxiliary speakers (passive).

1 POWER LINKS 2
Sockets for connecting Bang & Olufsen speakers with Power Link facility, e.g. the Beolab Penta or Beolab 3000/5000.

B&O STAND
Socket for connecting the Bang & Olufsen MS/MB 5000 motorized stand.

AUX/LINE
7-pin DIN socket with Datalink for Beolink connection to Bang & Olufsen audio system.

DECODER (EIA:IS-15)
Socket for connecting an IS-15 baseband decoder (not yet available in North America).

VCR1 (B&O AV1)
Bang & Olufsen specified A/V socket for connection of VX 5000 VCR.

VCR2 (B&O AV2)
Phono sockets for connection of second VX 5000 VCR or another VCR or CDV.

S-VIDEO IN
Socket for Super VHS connection. For use with a S-VHS video camera only or a second S-VHS VCR.

IN A/B/C – OUT 1/2/3
Sockets for RF connections.

VX 5000

Buttons on front panel

Primary:

EJECT
Cassette eject.

PLAY
Start playback.

<<
Rewind.

STOP
Stop playback or recording.

>>
Fast forward.

●
Stand-by.

Secondary:

HEADPHONE
Volume adjustment in headphones connected to VX 5000.

SOUND
Sound track switch.

T160
T160 VHS cassette selector (for correct time-left readout).

SOURCE
Recording input selector.

AV
Audio/video mode selector.

SPEED
Tape speed selector.

RECORD
Start recording.

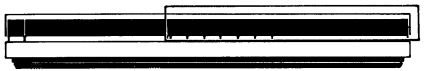
HQ OFF
Cuts out/in the HQ function.

INSERT
Video dubbing.

DUB
Audio dubbing.

REC LEVEL
Recording level adjustment sliders, left and right channels.

Displays



SA
Second Audio Program reception indicator.

STEREO
Stereo reception indicator.

88:88
Tape counter, track number or time left.
Program number if in recording pause mode and tuner-only mode.

T160
Indicator for T160 VHS cassette.

TIMER
Timer programmed. Blinks during timer recording.

LINE
Sound recorded from audio system (via 21-pin A/V socket).

AUX
Sound and pictures recorded via 21-pin A/V socket.

AUDIO
Audio mode indicator.

S VIDEO
Super VHS indicator.

VIDEO
Standard VHS indicator.

LINEAR
Linear sound track selected.

SP (LP) EP
Indicators for Standard Play, Long Play, Extended Play.

MIX
Linear and Hi-Fi sound tracks selected.

SA OFF
Second Audio Program cut out.

RECORDING
Recording in progress.

PAUSE
Recording pause mode or still mode.

HQ OFF
HQ function cut out.

DUB
Audio dubbing in progress.

INSERT
Video dubbing in progress.

L — — — — — — — — — — —
dB -40 30 20 10 7 4 2 0 2 4 7 +10
R — — — — — — — — — — —

Recording level indicators, left and right channels.

●
Stand-by indicator.

Sockets and switches
Front:

HEADPHONE
Headphones jack.

MICROPHONE
Microphone jack.

Rear panel:

S-VIDEO IN
Socket for video input for connection to a CTV with Y/C output.

AUDIO IN R L
Audio input sockets for the S-VIDEO input connector.

S-VIDEO OUT
Socket for video output to a CTV with Y/C input.

AUDIO OUT R L
Audio output sockets for the S-VIDEO output connector.

CAMERA PAUSE
Jack for video camera pause connector.

REMOTE SENSOR
Jack for connection of Bang & Olufsen VX Sensor (remote control receiver).

STILL ADJ.
Adjustment screw for still picture.

DECODER (EIA:IS-15)
Socket for connecting an IS-15 baseband decoder.

TV (B&O AV)
Bang & Olufsen specified A/V socket for connection to MX 5000 TV-set.

AC 120V
60 Hz
MAX 300W
120 V AC socket (polarized).

ADJUSTMENT
RF CHANNEL
26-38
Adjustment screw for video transmission channel.

IN A/B/C
OUT 1/2/3
Sockets for RF connection.
IN C/OUT 3 for RF decoder.

MAINTENANCE
MX 5000

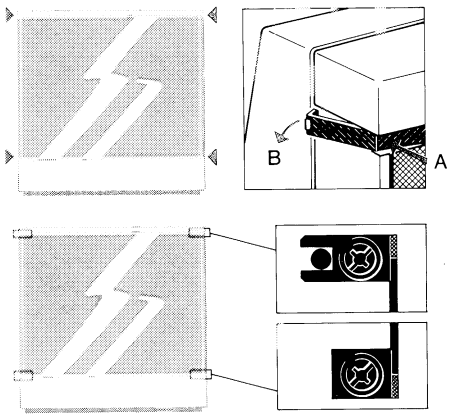
Cabinet
Wipe dust off the TV-set using a dry, soft cloth.

If necessary, remove grease stains or more persistent dirt using a soft cloth moistened with a little diluted mild detergent. Wring the cloth firmly before use.

Never use alcohol to clean your TV-set.

Contrast screen
Under special conditions dust particles may penetrate the space behind the contrast screen, forming a thin film of dirt on its inner surface and on the surface of the picture tube. This may affect the clarity of the picture adversely and the screen should be removed and cleaned. *Please note that the screen is made of glass and must be handled carefully.*

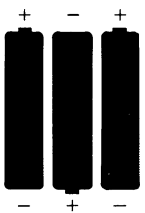
- First remove the upper and lower plastic strips. Press the strip firmly in one side (A). Carefully grip the end of the strip (B) and pull it out completely. When you have removed both strips, the four screws holding the contrast screen become accessible. Loosen the two lower screws and one of the two upper screws. Hold the contrast screen *firmly* while loosening the fourth and final screw.
- Once the contrast screen is detached, clean both sides of the contrast screen and the surface of the picture screen using a soft cloth.
- To replace the contrast screen, use the removal procedure in reverse order.
- Remove any resulting finger marks with a soft cloth.



Beolink 1000 terminal

The Beolink 1000 terminal may be wiped with a soft cloth moistened with a little diluted mild detergent. Wring the cloth firmly before use.

The three batteries in the terminal should be replaced as required. Use 1.5 V (size AAA - Alkaline) batteries.



VX 5000

Cabinet
Wipe dust off the VCR using a dry, soft cloth.

If necessary, remove grease stains or more persistent dirt using a soft cloth moistened with a little diluted mild detergent. Wring the cloth firmly before use.

Never use alcohol to clean your VCR.

Tape transport mechanism
The tape transport mechanism, including tape heads, should be cleaned at regular intervals. We recommend that this cleaning process be performed by a qualified technician. Use of cleaning tapes is not recommended.

Cassette care and storage

Follow these directions for continued high-quality performance from your cassettes.

- When you are finished with a cassette, rewind it and remove it from the VCR.
- Never attempt to force open the cassette door.
- Store cassettes vertically in their protective boxes at normal room temperatures. Avoid extreme heat and humidity. Extreme heat can warp the cassette or cause the tape to stretch excessively.
- Be especially careful to keep dust from entering the cassette and the VCR mechanism. All dust is abrasive and it will cause excessive wear of both the tape and the VCR's recording/playback heads.

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TECHNICAL SPECIFICATIONS

Beovision MX 5000	**Type 3250**
Visible picture-diagonal measurement	26"
Picture tube	Full square, black matrix, in Line 110 degrees
CTV system	NTSC, system M
Sound system	Multichannel Television Sound BTSC
Tuner range	VHF channels 2-6
	VHF mid. CATV A-5–A-1, A-I, VHF channels 7-13, VHF Super channels
	VHF Hyper channels W+1–W+28, UHF channels 14-83,
	UHF Ultra channels W+29–W+84
Tuning system	Digital, Fine Tune
Speaker system	2 x Log Line
Driver units	2 pcs. 3"
Sound output RMS	2 x 5 watts
Sound frequency range	Output amplifier 85-9,000 Hz
	Power Link output 3-20,000 Hz ± 1.5 dB
Power supply	120 volts 60 Hz
Power consumption	110 watts
Audio only	27 watts
Stand by	14 watts
Dimensions W x H x D	25½" x 26½" x 18¾"
Weight	105.8 lbs.
Connections	
Aerial input sockets	2 pcs. VHF/UHF and CATV – "F" type
	1 pc. for descrambler – "F" type
Aerial output sockets	2 pcs. for VCR and Link – "F" type
	1 pc. for descrambler – "F" type
A/V port	21-pin combine VCR/CTV, Video, Super VHS
IS 15 port	21-pin descrambler, EIA standard
A/V RCA connectors	7 pcs. for VCR no. 2
A/V S-socket	1 pc. for Super VHS, VCR no. 2
Audio Aux Link	7-pin IN/OUT two way datalink
Power Link socket	8 pin for active speakers
TV stand socket	4-pin for remote control
External speakers	2 pcs. 2-pin for speakers
Stereo headphones	Mini-jack in front
Accessories	
Stand ST 5000	Type 3082, 25½" x 34¼" x 19"
Shelf VX 5000	Type 3077, 25½" x 34¼" x 19"
Motorized TV base MB 5000	Type 3080, 25½" x 28¾" x 18¾"
Motorized TV stand MS 5000	Type 3083, 25½" x 35⅞" x 19"

Beocord VX 5000	**Type 4536**
Cassette format	VHS
Color system	NTSC
TV channels	VHF, UHF, CATV, Off Air 2-83, CATV 01-125
Number of TV channels	Off Air 82, CATV 125
Play channel	UHF channels 26-38
Sound, compatible normal/HiFi	Stereo, HiFi sound
Sound channels	Second Audio Program SAP
Tape speed	3 speed: SP, LP, EP
Max. playing time, tape T 160	2 hrs. 40 min., 5 hrs. 20 min., 8 hrs.
Counter	4 digit counter, remaining time, track number
Time programming	8 programmings, up to a year in advance, + daily, + weekly
Picture	
Slow motion video	Variable speed, digital
Still picture video	Digital
Freeze picture TV program	Digital
Search forward/rewind, slow	9 x normal speed
Search forward/revind, fast	SP 12 x normal speed, LP 24 x normal speed, EP 36 x normal speed
Index search	Track no. digital
Recording system	Super VHS, automatic switch, Super VHS/Standard VHS
HiFi sound	
Tape heads	4 video, 2 HiFi audio
Frequency range ± 3 dB	20-20,000 Hz
Dynamic range	>80 dB
Distortion	<0.5%
Channel separation	>55 dB
Wow and flutter	<0.005%
Power supply	120 volts 60 Hz
Power consumption	75 watts
Stand by	36 watts
Dimensions W x H x D	21 1/4" x 3 3/8" x 11 3/4"
Weight	22 lbs.
Connections	
A/V socket	21-pin for Beovision MX 5000
A/V socket	21-pin for descrambler
RF sockets	2 pcs. for RF input – "F" type, 2 pcs. for RF output – "F" type,
	1 pc. descrambler input – "F" type, 1 pc. descrambler output – "F" type
Microphone socket	Jack 2.5 mm
Stereo headphone socket	Jack 3.5 mm
Camera pause socket	Mini-jack
Link socket	Jack 3.5 mm

Subject to change without notice